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PROCEEDINGS OF THE SEMINAR ON "Banking Sector Reforms and the Real Sector Development in Nigeria", FOR CBN EXECUTIVE STAFF AT THE VICHI GATES HOTEL AND SUITES, BENIN CITY, EDO STATE, NOVEMBER 29 - DECEMBER 2, 2010

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Aims and Scope

The *Economic and Financial Review* is published four times a year in March, June, September and December by the Research Department of the Central Bank of Nigeria. The Review contains articles on research undertaken at the Bank, in particular, and Nigeria, in general, mainly on policy issues both at the macroeconomic and sectoral levels in the hope that the research would improve and enhance policy choices. Its main thrust is to promote studies and disseminate research findings, which could facilitate achievement of these objectives. Comments on or objective critiques of published articles are also featured in the review.

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Notes to Contributors

Information on manuscript submission is provided on the last and inside back cover of the Review.

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Welcome Address

Victor I. D. Oligbo*

The Governor, Central Bank of Nigeria, Mallam Sanusi Lamido Sanusi, CON
The Deputy Governor, Economic Policy, Central Bank of Nigeria, Dr. (Mrs.) Sarah O. Alade
Members of the Monetary Policy Committee,
Former Deputy Governor, CBN, Mr. Victor Odozi
Former Board Members here present
Consultant on Statistics to the Bank, Mrs. O.O. Akanji
Director of Human Resources Department
Director of Research
Departmental Directors here present
Our Erudite Resource Persons,
Our Esteemed Participants,
Gentlemen of the Press,
Distinguished Ladies and Gentlemen.

1. It is with great pleasure and rare honour and privilege that I warmly welcome you all to the ancient city of Benin for the 2010 Executive Seminar with the theme: **"Banking Sector Reforms and the Real Sector Development in Nigeria"**.
2. Over the years, the banking sector had undergone reforms with the aim of positioning it to play a catalytic role and, thereby, stimulating the real sector. However, opinions abound that the results of these reforms had not impacted on the real sector. In fact, some believe that the banks are the major problems of the manufacturing sector. It has also been postulated that the banks had not done well enough in providing credit to the real sector. However, a different school of thought believes that the problem of the real sector is not finance alone, but includes infrastructural deficiencies and the harsh economic environment in which they (real sector) operate in what are considered very key. One thing is very clear, and that is, that the Nigerian economy has great potentials and that what we need is the right policy and the right implementation attitude.

* Mr. Oligbo is the Branch Controller, Central Bank of Nigeria, Benin.

3. As a testimony to the reforms, the Bank has received accolades from different quarters. In applauding the CBN Banking Reforms, the United States Congress on 16th November, 2010 invited the CBN Governor, Mallam Sanusi Lamido Sanusi, CON and the Director General of Securities and Exchange Commission (SEC) Ms. Arunma Oteh, to give testimonies on the success story of the reforms. With the intervention funds for manufacturing, power and other sectors, I foresee a positive impact on the real sector.
4. This is why I am particularly delighted that Benin, the Heartbeat of the Nation is hosting this seminar which has as participants, decision makers, major players and stakeholders in the economy.
5. The theme of this seminar is, therefore, germane and could not have come at a more auspicious time than now. As you will soon discover, the organizers have painstakingly selected resource persons with varied experience. In view of this, I confidently assure you of a most enriching and rewarding seminar.
6. The benefits of this seminar would be incomplete if you restrict yourselves to the confines of this lecture and your hotel rooms. Therefore, distinguished colleagues, I implore you to find time to unwind, visit places of interest and also look at '**other sectors**'. After all, 'all work and no play make **Osaro** a dull boy'.
7. Although we refer to Benin as a construction site because of the laudable renovation works, courtesy of our able Governor, Comrade Adams Aliyu Oshiomhole mni. Nonetheless, we still have notable places of interest that would catch your fancy and leave indelible and wonderful memories in your minds. To mention but a few, the museum with its very rich historical artifacts, the Palace of His Royal Majesty, Omo N'oba N'edo, Uku Akpolokpolo, Oba Erediauwa, CFR, the Oba of Benin Kingdom, the popular Igun market noted for cultural artifacts. Please, find time to shop and take some along with you.
8. To all the participants, as policy makers, I urge you to pay rapt attention to the discussions that would be unfolding. The Branch is noted for excellent service delivery. So if there is anything that would make you enjoy your stay, please do not hesitate to let us know. The organizers would always link up with us. We are at your service.

9. Once again, distinguished ladies and gentlemen, it is my honour and privilege to welcome all of you to this seminar. I wish you successful deliberations.
10. Let me leave you with the words of our amiable Governor, Comrade Adams Aliyu Oshiomhole which I believe is very apt to this gathering ***“Nobody is going to be able to reform any part of Nigeria without stepping on toes. Changes cannot be painless but the comfort is that at the end, the benefit outweighs the cost”.***
11. Thank you and God bless.

Special Remarks

*Sarah O. Alade, PhD.**

The Special Guest of Honour
Departmental Directors
Branch Controllers
Distinguished Resource Persons
Esteemed Participants
Ladies and Gentlemen

1. It is my pleasure to present this special remark at the 2010 CBN Executive Seminar, organized by the Research Department in collaboration with the Human Resources Department. This is the 18th edition of this seminar series, and I would like to commend the two departments for sustaining the tempo, thus far.
2. The seminar provides a forum for the executive staff from across the departments of the Bank to meet annually to discuss selected contemporary issues with a view to providing policy advice to the Management of the Bank. As a learning organization, it is also an opportunity for participants to update their knowledge on topical economic issues. The Bank plays a strategic role in the economic growth process of the country which ultimately, affects the living standards of our fellow countrymen. This responsibility demands that we continually keep abreast of unfolding developments in the economy which are capable of exerting influence on this objective. A forum such as this, is a veritable opportunity for exchange of ideas and I implore all of you to take maximum advantage of it.
3. The theme of this year's Seminar, "Banking Sector Reforms and the Real Sector Development in Nigeria" is apt, coming at a time when the CBN and, indeed, the Federal Government has been paying priority attention to the real economy. You will agree with me that unemployment and poverty currently rank among the most daunting of our developmental challenges. You will also agree with me that the real sector, being the engine of growth, particularly, in developing and emerging economies,

* Dr. (Mrs) Alade is the Deputy Governor, Economic Policy, Central Bank of Nigeria.

holds the best promise for our country with respect to tackling these challenges. It is against this background, that efforts are being focused on addressing the binding constraints to investment in the sector.

4. From the perspective of the CBN, the primary objective is to ensure that the banking industry serves as a catalyst for propelling the real sector to realize its full potentials. Thus, in the last twelve months, a number of initiatives have been established to address the financing needs of the core activities in the real sector, including but not limited to agriculture, manufacturing, power, small and medium enterprises (SMEs) and aviation.
5. It is expected that if activities in these sectors are sufficiently stimulated, the multiplier effects would translate into employment generation and wealth creation and, consequently, have a salutary effect on national poverty level. This seminar, therefore, presents an opportunity for a critical examination of all issues that are germane to the theme, with a view to charting the way forward.
6. I am aware that a select team of facilitators has been assembled to lead discussions on the various topics. I enjoin you to take maximum advantage of their presence and interact freely amongst yourselves so that at the end of the seminar, we would have justified the time and the resources deployed to its organization. I assure you that Management would continue to support this effort by providing the resources needed to sustain the seminar series. It is also the expectation of Management that at the end of this exercise, productive ideas would have been generated as input to aid policy making decisions in the Bank.
7. On this note, I would like to formally declare the Seminar open and to wish you all, very fruitful and exciting deliberations.

The link between the Financial (Banking) Sector and the Real Economy

Charles N. O. Mordi*

I. Introduction

The 'real' economy consists of firms, households and other agencies engaged in the production of goods and services which can either be consumed now or put to use with a view to producing more in the future. Economic activity is conceptualized as 'real' because real resources are applied to produce something which people can buy and use. The financial system is mainly concerned either with moving funds around so that those who wish to buy can do so, or helping people to exchange ownership of the productive resources. The activities of the real economy are essential to life. The real economy produces food, heating, lighting, consumer goods and entertainment, among other activities. The job of the financial system is to facilitate that by making sure that funds are available when and where they are wanted. In that regard, the issue of the structure of the financial system is brought to the fore as it would provide alternative financing windows which the operators in the real sector can avail themselves. These institutions, therefore, become the conduit through which small or large manufacturing concerns can access finance and, ultimately, increase output.

Directly related to the structure of the financial system, is the role the financial system undertakes to coordinate economic activities including the cost of finance, availability of investment funds and profitable investment outlets. Caprio, et al. (1994) states that "... control through the financial system permits decentralization in decision making-the hallmark of a market economy: provided that some entrepreneur or group of investors is prepared to assume the risks of undertaking a project with borrowed funds and that some lender believes that the loan will be repaid, the project can go ahead." This view obviously asserts the unquestionable need to ensure the solvency of financial institutions and instil confidence in the payments system which are intended to overcome systemic risk.

Following from above, technology and skills of the operators as well as institutions with oversight roles must be adequately in tandem with the level of development

* Mr. Mordi is the Director of Research Department, Central Bank of Nigeria. The views expressed in this paper are those of the author and do not necessarily represent the views of the CBN or its policies. I acknowledge the assistance of Emmanuel T. Adamgbe in the preparation of this paper.

of the financial system to provide the needed support to the real sector. There is yet to be a consensus on whether the link between the financial sector and the real sector is 'real', is unidirectional flowing from the financial sector to the real sector or vice versa and bi-directional. Whichever way, there seems to be an emerging agreement among economists that a link exists. The main objective of this paper is to discuss the connections between the real economies—the tangible world of jobs, goods and services—and the more intangible world of finance—of money/credit flow, interest rates and the stock market. They have a long and eventful history.

To achieve this objective, the paper is divided into five sections. Following the introduction, the paper reviews what constitutes the structure and role of the financial system in section II. Section III attempts to identify the link between finance and the real economy, while section IV gives an overview of the channels of transmission of monetary policy to the real economy as it relates to making finance available to the real sector. Section V concludes the paper.

II. Structure/Role of the Financial System

The financial system comprises financial institutions and financial markets. The financial institutions include the banking system - central bank, banking institutions (commercial banks, merchant/investment banks, other deposit-taking institutions) and non-bank financial institutions (provident/pension funds, insurance, development finance institutions (DFIs), others). Financial markets comprise money and foreign exchange markets; capital markets - equity markets, bond markets, public debt securities, private debt securities – and derivatives markets.

The question of the role and structure of the financial system that should facilitate and sustain growth has largely remained inconclusive in the recent finance-growth literature. The general consensus viewpoints as articulated in Levine (2004) include: (i) countries with better functioning banks and financial markets are more likely to accelerate their growth pace; and (ii) better-functioning financial systems ease the external financing constraints that impede firm and industrial expansion. This section reviews the relevant literature in these dimensions.

II.1 Structure of the Financial System

The structure of financial system is conceptually viewed as the extent to which a country's financial system is bank-based or market-based.¹ Developing the

¹ According to Levine (2009), a bank-based financial system relies largely on banks in mobilizing savings and financing corporate investment, while a market-based financial system relies on securities markets and equity financing.

financial sector requires the synchronization of objective of achieving financial stability with that of growth. This is because institutional weaknesses² in the financial sector could cause or exacerbate systemic instability and undermine economic growth.

Zhuang, et al. (2009) notes that maturity and currency transformation, and asymmetric information constitutes some of the features of banks that make them susceptible to runs and distresses. A run on systemically important bank or financial institution could trigger a contagion that can metamorphose into a systemic banking crisis. Thus, developing the structure of the financial system must incorporate a framework that will ensure macroeconomic stability, effective regulation and supervision, and the elimination of other structural bottlenecks in the financial sector.

Many views abound on the sequencing of the structure of the financial sector and raise the question of whether the evolution of banks should precede capital market development. A microcosm of this question would be on the relative importance of large and small banks. Lin (2009) recently argued that low-income countries should make small, local banks the bedrock of their financial systems. The backdrop of his argument is centred on the seeming need to support the competitive sectors³ of the economy which according to Lin (2009) are not in congruence with the size and sophistication of financial institutions and markets in the developed world.

Banerjee (2009) points to the possibility of too little risk-taking when banks are not nearly that big. Small banks may be unable to supply risk capital but the stock market in principle could directly fund large firms to reach a global scale and by enabling a venture capital model of funding high risk new ideas. However, he argues that regulatory challenges to making a stock market efficient are daunting.

For Moss (2009), local community banks and not the stock markets provide capital for the small companies. According to him, to create an enabling environment for the private sector, government of developing countries should focus on creating a legal and financial framework to promote access to credit across the spectrum of demand. Stock markets also promote wider participation in the formal economy—public listings as an avenue for allowing small local

² Institutional weakness is exemplified by poor regulation and supervision, weak corporate governance, and moral hazards in excessive deposit insurance and other protective measures.

³ In developing countries the competitive sectors are often dominated by the activities of small and medium-scale manufacturing enterprises, farming, and services firms.

investors to participate in privatizations and as a way for large multinationals to list their local subsidiaries.

Schoar (2009) agrees that a competitive banking sector is necessary in facilitating firm growth and competition, and that equity markets constitute only a small portion of overall financing in developing countries. She underscores that scale was important for banks, and tiny banks will not garner sufficient capital to finance small businesses for expansion. In particular, the banking sector should be established and tailored to improve the real economy and, as a tool to create jobs and opportunities. Schoar (2009) proposes a two-tier banking system where one tier consist of small banks that serve basic financial needs and the other tier should consist of larger banks that serve medium firms that can create jobs for many others and will grow to large scales.

According to Levine (2009) the form and function of financial institutions are country-specific and would rely on the legal and political system as well as the evolving economic activities. He, therefore, argues that a suitable policy objective would be to craft laws, regulations, and institutions that would create an enabling environment to engender competition among financial institutions in the provision of essential credit, risk, and liquidity services to the real economy. He states that although the stock markets do not provide much capital to firms, they provide complementary risk diversification services that facilitate the efficient allocation of credit.

Zingales (2009) favors a more fragmented and competitive banking sector, which according to him creates a fluid transition from a pure banking system to a system that relies both on markets and banks, as economic activities expand. To Thoma (2009), developing countries require not only small banks and microfinance institutions that support small borrowers, but could also do with relatively sophisticated financial instruments such as hedging price risks through futures markets, insuring against crop failures, purchasing farm equipment through pooling arrangements, and managing the problem brought about by seasonality. He acknowledges inadequate information on the financial history and worthiness of potential borrowers as a challenge and that small banks were better positioned to collect such information.

II.2 Role of the Financial Sector in the Economy

Economists believe that the most important role of the financial sector in facilitating growth is to reduce information, enforcement, and transaction costs. This is achieved through a number of specific functions that the financial sector

performs. The basic functions of financial sector are: (i) to provide efficient payments mechanism for the whole economy; and (ii) intermediate between lenders and borrowers. These basic functions are the domain of banking institutions. Banks together with other financial intermediaries play a major role in facilitating the overall funding of the economy:

- Banks are major suppliers of credit to finance productive investment and other debt-financed activities;
- The banking system of a country in its sacrosanct role as an intermediary performs the crucial task of channelling resources from savings to investment; and
- The greater the financialization of savings, the greater the potential for the channelling of savings to productive activities and the more efficient the system, the better the mobilization of resources.

Indeed, financial intermediaries perform five basic functions that affect the real economy. Levine (2004) and Zhuang, et al. (2009) identified and summarized five key functions that a financial system provides in facilitating growth:

- Mobilizing and pooling savings. When it is done efficiently, savings mobilization enhances technological innovation and resource allocation. The process of doing so from diverse savers is expensive. Thus, to mobilize savings, transaction costs and informational asymmetry must be contained. Financial systems that are more effective at agglomerating capital promote economic development by increasing savings, exploiting economies of scale, and overcoming investment indivisibilities. With large, indivisible projects, financial arrangements that mobilize savings from many diverse individuals and invest in a diversified portfolio of risky projects facilitate a reallocation of investment toward higher return activities with positive implications for economic growth.
- Producing information ex-ante about possible investments and allocating capital. Individual savers face high costs of acquiring and processing information on firms, managers, and market conditions, which could prevent capital from flowing to its best uses. Financial intermediaries reduce information costs through specialization and economies of scale and thereby improving resource allocation and the pace of growth. Only better information can engender the identification of appropriate

production technologies and effective and efficient entrepreneurs. Stock markets may also stimulate the generation of information about firms. Expansion in markets and their growing liquidity, incentivize agents to expend resources in researching firms because it is easier to profit from this information by trading in big and liquid markets.

- Monitoring investments and exerting corporate governance. The degree to which the owners of capital (shareholders and creditors) can effectively resolve⁴ the 'principal – agent problem' has important implications for savings, decisions for allocating the savings, and their utilization. Good corporate governance helps improve the efficiency with which firms allocate and utilize resources and makes savers more willing to finance production and innovation. Zhuang et al. (2000) state that monitoring and disciplining by creditors (banks or bondholders), shareholder activism exercised by institutional investors (such as banks, pension funds, etc), threat of takeovers and market for corporate control, threat of insolvency, and capital market competition, among others, are effective mechanisms for strengthening corporate governance.
- Facilitating the trading, diversification and management of risks. Financial systems help mitigate the risks associated with individual projects, firms, industries, regions, and countries, etc. A financial system's ability to provide risk diversification services affects long-run economic growth by improving resource allocation and encouraging savings. Financial systems also enhance liquidity, reduce liquidity risks, increase investment in longer-term, higher-return, but illiquid assets, and promote economic growth.
- Facilitating the exchange of goods and services. A financial system facilitates transactions in the economy, both providing and improving the payment systems and by reducing transaction and information costs associated with financial transactions. In this way specialization of production is encouraged, technological innovation is enhanced, and growth is ultimately achieved. Backward linkage effects occur from these productivity gains to financial market development and, thus, economic development can spur the development of the financial sector.

⁴ Effective corporate governance helps in separating ownership from control and serves as a check on the activities of managers and, thus, influences managers to optimize returns from investment.

Figure 1
A Schema on the Link between Financial Sector and Real Economy



III. Financial Sector and Real Economy—Is there a Link?

The link between financial sector and real economy can be explored from two perspectives, namely, the intermediation role of financial institutions and monetary policy perspective - the transmission mechanism of monetary policy impulses. Economists have long believed that financial markets and institutions are important factors in supporting economic development. Economists like Goldsmith (1969), McKinnon (1973), Shaw (1973) and Fry (1995) state a strong positive empirical relation between the degree of financial market development and the rate of economic growth, and a negative relation between financial repression and growth. However, these early literature failed to give theoretical linkage between financial development and growth.

Recently, many economists have developed a model that drives a formal link between financial intermediation and growth. This literature considers two interrelated issues: it analyses how financial intermediation affects economic growth, and it studies how economic growth might itself affect the evolution and growth of financial intermediation. Levine (1997), for instance agrees that financial intermediaries enhance economic efficiency and, eventually, growth by helping to allocate capital to its best uses. Several other cross-country and panel data studies such as King and Levine (1993a,b), Khan and Senhadji (2000) and Levine, et al. (2000) showed that financial development had a positive impact on economic growth. Hassan and Yu (n.d) in a panel study, notes that in the short-run, there exists strong linkages between financial development and economic growth in high-income OECD countries, but not in South Asian and Sub-Saharan African regions. They, therefore, called for different efforts to achieve steady economic growth across geographic regions and income groups.

Lucas (1988), however, argues that the role of the financial sector in economic growth is 'over-stressed'. Demetriades and Hussein (1996) did not find evidence

to support the view that finance led economic growth. Their evidence seems to support for the majority of the countries they examine, bi-directional causality, while economic growth leads financial development in some instances. The argument for bi-directional causality is collaborated by the finding of Luintel and Khan (1999) for all ten less-developed countries utilized in the study.

It can be interpreted that high financial development increases growth or high growth leads to more developed financial systems. From the above literature review, it can be concluded that financial development is an important determinant of economic development. Many economists point out that not only financial development allows for economic growth but economic growth increases the incentive for financial development. Efficient financial systems help countries to grow by mobilizing additional financial resources and by allocating those resources to the best uses. Of course, Mehl, et al. (2005) notes that the financial sector is growth-supportive only if financial institutions are subject to proper governance structures resulting, in particular, in behaviour of banks that is incentive-compatible with that of depositors or borrowers. This is because the prevailing asymmetric information, subject banks to moral hazard and adverse selection problems.

As economies develop, so must the financial systems that serve them. As the financial system grows, efficient channelling of funds lowers both the transfer costs and risk-taking from savers to borrowers. The financial intermediary allows a better allocation of resources in the economy and, therefore, stimulates capital accumulation and growth. On the other hand, as a consequence of economic growth, investors increase their participation in financial market. The financial intermediaries lead to a better allocation of savings to investment, increases the rate of capital accumulation and the growth rate of the economy.

Financial sector development and economic development are inter-related. No economy can grow and improve the living standards of its population in the absence of a well-functioning and efficient financial sector. A sound and healthy banking system is directly related to economic growth and development.

Modern growth theory (Romer 1986; Lucas 1988; Rebelo 1991; Grossman and Helpman 1991; Pagano, 1993) identifies two main channels through which the financial sector might affect long-run growth in a country: through catalyzing the capital accumulation (including both human and physical capital) and by increasing the rate of technological progress. The five basic functions of an efficiently working financial sector allow the above two channels to work for

promoting growth by: mobilizing savings for investment, facilitating and encouraging capital inflows, and allocating the capital efficiently among competing uses.

IV. Overview of channels of monetary policy transmission mechanism (MTM)

Monetary policy can be defined as the measures taken by the monetary authorities to influence the quantity of money or the rate of interest with a view to achieving stable prices, full employment and economic growth. Because monetary policy action works through financial markets, the transmission mechanism provides another link between the financial sector and real economy.

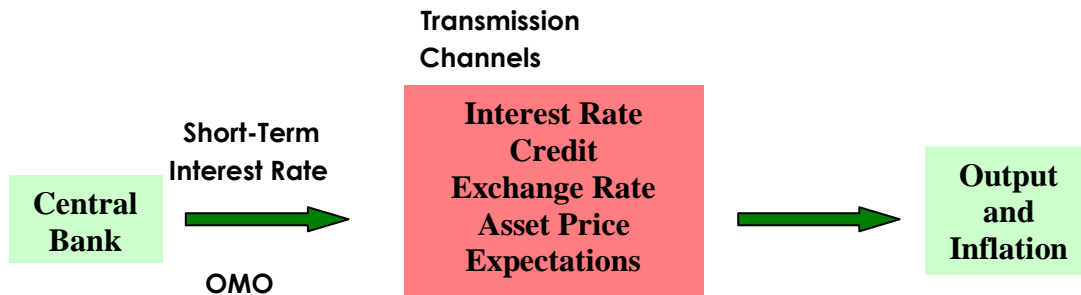
Central banks try to influence the quantity of money and/or interest rates with a view to achieving price stability, full employment and economic growth. This implies that there must be some link (or links) between monetary/financial variables (such as the quantity of money, interest and exchange rates) and macroeconomic variables (such as the price level, the level of employment and the gross domestic product (GDP)). These links are called the monetary transmission mechanism, that is, the way in which monetary/financial changes affect the real economy.

There are various views about the monetary transmission mechanism. Some economists, for example, see a direct link between changes in the quantity of money (M) and changes in the price level (P) but no link between changes in M and changes in real GDP. Other economists emphasize the link between interest rates (i) and investment spending (I) in the economy. They regard interest rates as the outcome of the interaction between the demand for and the supply of money. For example, if the money supply increases, interest rates will tend to fall. At the lower interest rates more investment projects will become profitable, therefore, investment (I) will increase. This, in turn, will result in an increase in GDP. That is why observers often call on the central banks to lower interest rates in an attempt to stimulate economic growth and employment. The literature on MTM has identified about five channels of monetary policy transmission (Mishkin, 1996) as follows:

- Interest rate channel (interest rate pass-through)
- Credit channel
- Exchange rate channel (exchange rate pass-through)
- Other asset price channel
- Expectations channel

A simplified illustrative transmission mechanism is shown in Figure 2 below.

Figure 2
A Simplified Illustrative Monetary Transmission Mechanism



IV.1 Interest Rate Channel

The interest rate channel operates within an IS-LM framework and is considered as the conventional or traditional view of MTM. Interest rate channel can be characterized by the following schematic showing the effects of a monetary expansion:

$$M \uparrow \Rightarrow ir \downarrow \Rightarrow I \uparrow \Rightarrow Y \uparrow \Rightarrow \pi \downarrow \uparrow \tag{1}$$

Where **M** is Monetary Policy

ir is real interest rate

I is investment spending

Y is aggregate output

π is inflation

Expansionary monetary policy: a fall in real interest rate lowers cost of capital resulting in a rise in investment spending (business investment spending & consumer spending - residential housing + consumer durable expenditure) which will lead to an increase in aggregate demand and a rise in output.

IV.2 Credit Channel

The credit channel operates through the quantity of lending banks undertake. It is an enhancement mechanism operating through problems of asymmetric information in financial markets (Bernanke and Gertler, 1995). Two distinct credit channels arise as a result of information problems in credit market: those that operate through the effects on bank lending (bank lending channel); and those that operate through the effects on firms' and households' balance sheet (balance sheet channel).

IV.2.1 Bank lending channel

The lending channel operates under certain assumptions. According to Bernanke and Blinder (1988), and Kashyap, Stein and Wilcox (1993), firms should equally likely substitute between loans from financial institutions and bonds from the general public. In addition, the central bank should be able to influence the supply of loans through the use of monetary instruments. Thus, the lending channel is effective if much of the firm's total expenditure is financed from the banks. Thus, the size of bank finance expenditure vis-à-vis other sources, becomes crucial in explaining the lending channel of monetary policy transmission. Because of asymmetric problems in credit market, certain borrowers will not have access to the credit market unless they borrow from banks:

$$\mathbf{M}\uparrow \Rightarrow \mathbf{R\&D}\uparrow \Rightarrow \mathbf{L}\uparrow \Rightarrow \mathbf{I(C)}\uparrow \Rightarrow \mathbf{Y}\uparrow \quad (2)$$

Where **R&D** is research and development

L is liquidity and

I(C) is investment spending while other variables are as previously defined

The basic idea underlying this channel is that banks play special role in financial system—mobilizing deposits as well as granting loans for which few close substitutes exist and, therefore, are in a vantage position to solve asymmetric information problems in credit markets. Small banks tend to rely on deposits as principal source of funding for lending, while many small firms rely on bank loans as the principal source of funds for investment.

Juks (2004) and Kohler, Hommel and Grote (2006) found support for the existence of the bank lending channel in emerging market economies. Liquidity was found to insulate loan supply from interest rate shocks in the Baltic countries. Agha, et. al (2005) in a study of the transmission mechanism of monetary policy in Pakistan asserted that the role of bank lending is prominent because of the dominance of the banking sector. Other factors that might have enhanced the banks' role included financial reforms, market-based credit allocation and crowding-in of private sector credit due to the decline in fiscal dominance.

The extant literature shows that the bank lending channel is an important medium through which monetary policy permeates the real sector of the economy. Therefore, in the pursuit of price stability by monetary authorities, the consideration of the impact of lending on monetary aggregates is a necessary condition for attaining macroeconomic stability. A major implication of the credit view is that monetary policy will have a greater effect on expenditure by smaller

firms, which are more dependent on bank loans than it will on large firms, which can access the credit markets directly through stocks and bond markets.

IV.2.2 Balance Sheet Channel

The balance sheet channel is also referred to as the **broad credit channel**. Like bank lending channel, balance sheet channel arises from the presence of asymmetric information problem in credit markets. The basis of this channel is the net worth of business firms and the problems of adverse selection and moral hazard. It is based on the theoretical prediction that external finance premium facing a borrower depends on the borrower's financial position. Thus, the greater the borrower's net worth, the lower the external finance premium should be.

Since borrowers' financial positions affect the external finance premium and, thus, the overall terms of credit faced by them, fluctuations in the quality of borrowers' balance sheet similarly should affect their investment and spending decisions. The lower the net-worth of business firms the more severe the adverse selection and moral hazard problems in lending to these firms. Lower net worth means that lenders in effect have less collateral for their loans and so potential losses from adverse selection are higher. A decline in net worth, which raises the adverse selection problem, leads to decreased lending to finance investment spending. The lower net worth of businesses also increases the moral hazard problem because it means that owners have lower equity stake in their firms, giving them more incentive to engage in risky investment projects. Since taking on riskier investment projects makes it more likely that lenders will not be paid back, a decrease in businesses' net worth leads to a decrease in lending and, hence, in investment spending with implication for the real economy and, thus, economic growth.

Expansionary monetary policy affect firm's balance sheet in several ways:

- Rise in stock prices
- $M\uparrow \Rightarrow P_s\uparrow \Rightarrow \text{firms' net worth } \uparrow \Rightarrow \text{adverse selection } \downarrow, \text{ moral hazard } \downarrow \Rightarrow \text{Lending}\uparrow \Rightarrow I\uparrow \Rightarrow Y\uparrow$ (3)
- Cash flow channel
- $M\uparrow \Rightarrow i\downarrow \Rightarrow \text{firms' cash flow}\uparrow \Rightarrow \text{adverse selection } \downarrow, \text{ moral hazard } \downarrow \Rightarrow \text{Lending}\uparrow \Rightarrow I\uparrow \Rightarrow Y\uparrow$ (4)
- Unanticipated price level channel

- $M \uparrow \Rightarrow \text{unanticipated } P \uparrow \Rightarrow \text{firms' real net worth } \uparrow \Rightarrow \text{adverse selection } \downarrow, \text{ moral hazard } \downarrow \Rightarrow \text{Lending} \uparrow \Rightarrow I \uparrow \Rightarrow Y \uparrow$ (5)

The above mechanisms apply equally to households.

Agung (2000) examined the role of cash flow and leverage in firm investment to test indirectly whether the balance sheet channel exists in Indonesia. The result confirmed the existence of the channel, though it did not reveal whether monetary contraction exerts significant effects on the balance sheet of firms. Agung, et al. (2001) further investigated explicitly the existence of the balance sheet channel in Indonesia by extending the data employed by Agung (2000) to include the crisis period. The empirical evidence suggested that firms' balance sheet variables are very important determinants of the firms' investment and that small firms are more sensitive to their balance sheet changes than large firms.

IV.3 Exchange Rate Channel

Several studies, such as Arnostova and Hurnik (2004), Dabla-Norris and Floerkemeier (2006) and Eichenbaum and Evans (1995), have investigated the exchange rate channel and established the importance of the exchange rate channel in the transmission of monetary policy to the real economy.

With globalization and the advent of flexible exchange, more attention had been paid to how monetary policy affects exchange rates, which in turn affect net exports and aggregate output. This channel also involves interest rate effects because when domestic interest rates fall, domestic currency deposits (assets) become less attractive relative to deposits (assets) denominated in foreign currencies.

As a result, the value of domestic currency deposits (assets) relative to other currency deposits (assets) falls, and the domestic currency depreciates. The lower value of domestic currency makes domestic goods cheaper than foreign goods, thereby causing a rise in net exports and, hence, in aggregate output. The schematic for the MTM that operates through the exchange rate is:

$$M \uparrow \Rightarrow \text{ir} \downarrow \text{ E} \downarrow \Rightarrow \text{NX} \uparrow \Rightarrow Y \uparrow \quad (6)$$

Where E is value of domestic currency deposits

NX is net exports and other variables as previously defined

IV.4 Other Asset Price Channel

Over the last three decades, there has been a surge in empirical research on the role of asset prices as a channel of monetary policy transmission. A study on the impact of housing wealth on consumption using German data, suggested the existence of a significant link between consumption and housing wealth (Hordahl and Packer, 2007). Eichengreen and Tong (2003) also confirmed the link between fluctuations in asset prices and changes in monetary policy regimes. Similarly, Kannan, (2006) tested the predictive power of equity prices for inflation rate and economic activity in India and discovered that stock prices seemed to be a leading indicator of inflation, though they appeared to lack predictive power for the output gap.

Saxton (2003) noted that asset prices could mirror price bubbles since such movements influenced and help to predict general price inflation. In this regard, if equity prices fall, the incentive to buy stock or use it as a source of financing investment weakens. For real estate, price affects aggregate demand through its direct effect on housing expenditure and increase in housing wealth. This would in turn lower the cost of financing housing investment, while increasing the prices of real estate. He, therefore, concluded that asset prices should be included in a broader and more comprehensive measure of the general price level which could be factored into the formulation of monetary policy by central banks.

Studies by Al-Mashat and Billmeier (2007) on asset price channel in Egypt concluded that the rapid development in the Egyptian stock market index between March 2003 and February 2006 could have contributed to the impact that the monetary policy stance had on real activities and prices. McCarthy and Peach (2002) in a study of residential investment focused on the effects of securitization on the monetary policy transmission mechanism by examining how regulatory changes and other innovations in housing finance had impacted on the transmission of policy shocks to housing investment. They discovered that interest rates as opposed to quantity constraints have taken on a larger role, since the dismantling of regulation and the shift from thrift-based intermediation to a more market – oriented system of housing finance. Perhaps as a consequence of these changes, mortgage interest rates responded swiftly to monetary policy than they did prior to 1986. However, residential houses responded more slowly and fluctuated more or less concurrently with the overall level of economic activity.

Thygesen (2002) noted that the transmission mechanism through changes in asset price to the real economy was well understood though difficult to quantify empirically. Thus, the three main transmission channels through which this could occur are the wealth effect, the Tobin's Q effect and changes in credit through the balance sheet of financial intermediaries.

Ehrmann and Fratzscher (2004) examined the reaction of equity markets to the US monetary policy in the period 1994 to 2003. They explained that a high degree of market volatility, changes in the direction of monetary policy, and unanticipated changes in the federal funds rate cause stronger effect on stock prices. The effect is stronger in industries that are cyclical and capital-intensive.

Thorbecke (1997) found that an expansionary monetary policy increased ex-post stock returns. With a low interest rate, firms' economic activity increased, leading to larger cash flows and higher returns. Similarly, Cooley and Quadrini (1999) developed a value-weighted index and employed a general equilibrium model with heterogeneous, old firms where financial factors played an important role in production and investment decisions, to examine the response of stock market index to monetary policy shocks. They found that small firms responded more to monetary shocks than big firms and as a result of the financial decisions of firms, monetary shocks had impact on output. Furthermore, monetary shocks led to considerable volatility in the stock market.

Two types of effects have been identified under the other asset price channel of transmission: Tobin's q-Theory and Wealth effects. Tobin's q-theory (Tobin, 1969) provides an important mechanism for how movements in stock prices can affect the economy. It explains how monetary policy can affect the economy through its effects on the valuation of equities. Tobin's q is defined as the market value of firms divided by the replacement cost of capital.

If q is high, the market price of firms is high relative to the replacement cost of capital, and new plant and equipment capital is cheap relative to market value of firms. Companies can then issue stock and get a high price for it relative to the cost of the facilities and equipment they are buying. Investment spending will rise, because firms can buy a lot of new investment goods with only a small issue of stock.

Conversely, when q is low, firms will not purchase new investment goods because the market value of firms is low relative to the cost of capital. The crux of the Tobin q-model is that a link exists between stock prices and investment spending.

The workings of the Tobin q-theory of monetary transmission is as follows:

$$M \uparrow \Rightarrow P_s \uparrow \Rightarrow q \uparrow \Rightarrow I \uparrow \Rightarrow Y \uparrow \tag{7}$$

Where P_s is Stock prices and
 q is Market value of firms
Replacement cost of capital

While other variables are as previously defined

An alternative description of this mechanism is through the cost of capital:

$$M \uparrow \Rightarrow P_s \uparrow \Rightarrow c \downarrow \Rightarrow I \uparrow \Rightarrow Y \uparrow \tag{8}$$

c is cost of capital

The wealth channel looks at how consumers' balance sheet might affect their spending decisions. Modigliani (1971) in his life-cycle model stated that consumption is determined by the lifetime resources of consumers, not just today's income. An important component of consumers' lifetime resources is their financial wealth, a major component of which is common stocks. Thus, the channel of transmission is as follows:

$$M \uparrow \Rightarrow P_s \uparrow \Rightarrow W \uparrow \Rightarrow C \uparrow \Rightarrow Y \uparrow \tag{9}$$

Where W is financial wealth and
 C is consumption.

Other variables are as previously defined

A second wealth effect is through housing prices, because housing prices are considered an important component of household wealth. Thus, the monetary transmission mechanism is:

$$M \uparrow \Rightarrow P_h \uparrow \Rightarrow W \uparrow \Rightarrow C \uparrow \Rightarrow Y \uparrow \tag{10}$$

The Tobin's q framework can also be applied to the housing market, where housing is equity.

IV.5 Expectations Channel

Cerisola and Gelos (2005) showed the importance of anchoring expectations in inflation targeting regime, while Blanchflower (2008) revealed that inflation expectations were strongly influenced by past experiences, while evidences of future path of prices were highly correlated with an individual's evaluation of

current inflation. These conclusions were corroborated by other earlier studies such as Wuryandani, et. al. (2001), Mello and Moccerro (2006), Goeltom (2008) and Orphanides and Williams (2002). They revealed that although inflation expectations were far from being efficient under an imperfect knowledge conditions, the uncertainties would aggravate inflation and distort the trade-off between inflation and output growth in monetary policy target. Also, they showed that expected inflation is determined predominantly by the exchange rate, past inflation, and the interest rate. The market expects inflation to increase as the interest rate increases.

Mohanty and Turner (2008) observed that most central banks agree that the growing role of the expectation channel has implications for the magnitude of their interest rate response. For example, in Colombia, the volatility of the policy rate had fallen since 2000 following improved credibility of monetary policy. Similarly, in Israel, more stable nominal wage expectations had allowed the central bank to moderate interest rate movements. Mayes (2004) in his study on the monetary policy transmission mechanism in the Baltic States found that monetary policy actions exerted effects on the economy through their impact on the confidence and expectations of economic agents about the future outlook of the economy. In particular, expectation effects might improve monetary policy transmission through the other channels by shortening reaction lags. He underscores how commitment to future expansionary monetary policy can raise expected price level and, hence, expected inflation

$$M \uparrow \Rightarrow P_e \uparrow \Rightarrow \pi_e \uparrow \Rightarrow ir (=i - \pi_e) \downarrow \Rightarrow I \uparrow \Rightarrow Y \uparrow \quad (11)$$

Where P_e is expected price level and

π_e is expected inflation

Other variables are as previously defined.

V. Conclusion

Linkages go both ways from the financial to the real sector and from the real to the financial sector. The financial sector's contribution to growth lies in the central role it plays in mobilizing savings and allocating these resources efficiently to the most productive uses and investments in the real sectors. The behaviour of the financial sector affects the behaviour of the real economy. People respond to stock market booms (by feeling rich and spending more) and to stock market slumps (by hoarding their incomes and cancelling spending plans). The real economy generates financial activity by employing people (who wish to save some of their income), in firms (which wish to borrow for investment purposes). Causality works in both ways: The link between the financial and real economy

has a long and eventful history. Empirical studies have demonstrated the preponderance of evidence suggesting a positive relationship between financial development and economic growth. When a crisis strikes, their connections are very evident and we pay attention. The recent financial and economic crises provide a very ample confirmation of the link between the two. The link between the financial sector and the real economy is always relevant—not only in times of crisis but even during periods of stability.

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An Overview of Current Banking Sector Reforms and the Real Sector of the Nigerian Economy

*Cajetan M. Anyanwu**

I. Introduction

An economy is usually compartmentalized into four distinct but related sectors. These are the real, external, fiscal or government and financial sectors. Real sector activities include agriculture, industry, building and construction, and services. The sector is strategic for a variety of reasons. First, it produces and distributes tangible goods and services required to satisfy aggregate demand in the economy. Its performance is, therefore, a gauge or an indirect measure of the standard of living of the people. Second, the performance of the sector can be used to measure the effectiveness of macroeconomic policies. Government policies can only be adjudged successful if they impact positively on the production and distribution of goods and services which raise the welfare of the citizenry. Third, a vibrant real sector, particularly the agricultural and manufacturing activities, create more linkages in the economy than any other sector and, thus, reduces the pressures on the external sector. Fourth, the relevance of the real sector is also manifested in its capacity building role as well as in its high employment and income generating potentials.

Economic reforms generally refer to the process of getting policy incentives right and/or restructuring key implementation institutions. As part of economic reforms, financial sector reforms focus mainly on restructuring financial sector institutions and markets through various policy measures. As a component of the financial sector, the reforms in the banking sector seeks to get the incentives right for the sector to take the lead role in enhancing the intermediation role of the banks and enable them contribute to economic growth.

As articulated by Omoruyi (1991), CBN (2004) and Balogun (2007), banking sector reforms in Nigeria have been embarked upon to achieve the following objectives, among others: market liberalization in order to promote efficiency in resource allocation, expansion of the savings mobilization base, promotion of investment and growth through market-based interest rates. Other objectives are: improvement of the regulatory and surveillance framework, fostering healthy competition in the provision of services and laying the basis for inflation control and economic growth.

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Five distinct phases of banking sector reforms are easily discernible in Nigeria. The first occurred during 1986 to 1993, when the banking industry was deregulated in order to allow for substantial private sector participation. Hitherto, the landscape was dominated by banks which emerged from the indigenization programme of the 1970s, which left the Federal and state governments with majority stakes. The second was the re-regulation era of 1993-1998, following the deep financial distress. The third phase was initiated in 1999 with the return of liberalization and the adoption of the universal banking model. The fourth phase commenced in 2004 with banking sector consolidation as a major component and was meant to correct the structural and operational weaknesses that constrained the banks from efficiently playing the catalytic role of financial intermediation. Following from the exercise, the aggregate capital of the consolidated banks rose by 439.4 per cent between 2003-2009, while deposit level rose by 241.8 per cent. However, this was not reflected in the flow of credit to the real economy, as the growth rate of credit fell during this period, while actual credit did not reflect the proportionate contribution of the sector to the GDP.

The current and fifth phase, was triggered by the need to address the combined effects of the global financial and economic crises, as well banks' huge exposures to oil/gas and margin loans, which were largely non-performing; corporate mis-governance and outright corruption, among operators in the system. This round of reform, therefore, seeks to substantially improve the banking infrastructure, strengthen the regulatory and supervisory framework, and address the issue of impaired capital and provision of structured finance through various initiatives, so as to provide cheap credit to the real sector, and financial accommodation for small and medium-scale enterprises (SMEs).

It is against this background that this paper seeks to examine the developments in the banking industry and the real sector of the Nigerian economy since the fourth phase of the reforms which began in 2004. Specifically, the paper will review the reform programmes and how they have impacted on the flow of credit to the real sector. With the realization that the sector is facing challenges well beyond the realm of finance, other constraints would be identified and, thereafter, policy interventions recommended with a view to making the banking sector reforms more effective.

The rest of the paper is organized as follows. Section two provides the theoretical underpinning in the relationship between the financial industry and the real sector developments, while section three periscopes the banking sector reforms since 2004. Section four reviews developments in the real sector since 2005, and

section five identifies some of the binding constraints that would require policy intervention. Section six concludes the paper.

II. Financial Sector Developments and Economic Growth Nexus

II.1 Theoretical Underpinning

There is ample theoretical evidence reinforced by a number of empirical works, which supports a positive relationship between financial sector development and growth. Principally, the financial system functions to mobilize and channel financial resources through institutions or intermediaries from surplus economic units to deficit units.

A well-developed financial system enhances investment by identifying and funding good business opportunities, mobilizing savings, enabling trading, hedging and diversifying risk, and facilitating the exchange of goods and services. These functions result in a more efficient allocation of resources, rapid accumulation of physical and human capital, and faster technological progress, which in turn result in economic growth and, by extension, the development of the real sector. An efficient financial system is one of the foundations for building sustained economic growth and an open, vibrant economic system. In the early neoclassical growth literature, financial services were thought to play only a passive role of merely channeling household savings to investors. However, many later studies have been associated with more positive roles for the financial sector.

Schumpeter (1912) in his theoretical link between financial development and economic growth opines that the services provided by financial intermediaries are the essential drivers for innovation and growth. His argument was later formalized by McKinnon (1973) and Shaw (1973), and popularized by Fry (1988) and Pagano (1993). The McKinnon-Shaw paradigm postulates that government restrictions on the operations of the financial system, such as interest rate ceiling, direct credit programs and high reserve requirements may hinder financial deepening, and this may in turn affect the quality and quantity of investments and, hence, have a significant negative impact on economic growth. Therefore, the McKinnon-Shaw financial repression paradigm implies that a poorly functioning financial system may retard economic growth.

The endogenous growth literature also supports this argument that financial development has a positive impact on the steady-state growth (Bencivenga and Smith, 1991; Bencivenga, et al., 1995; and Greenwood and Jovanovic, 1990, among others). Well-functioning financial systems are able to mobilize household

savings, allocate resources efficiently, diversify risks, induce liquidity, reduce information and transaction costs and provide an alternative to raising funds through individual savings and retained earnings. These functions suggest that financial development has a positive impact on growth. McKinnon (1973) and Shaw (1973) are the most influential works that underpin this hypothesis and suggest that better functioning financial systems lead to more robust economic growth. McKinnon (1973) considered an outside money model in which all firms are confined to self-finance. Hence, physical capital has a lumpy nature where firms must accumulate sufficient savings in the form of monetary assets to finance the investment projects. In this sense, money and capital are viewed as complementary assets where money serves as the channel for capital formation 'complementarity hypothesis'.

The 'debt-intermediation' view proposed by Shaw (1973) is based on an inside money model. He argues that high interest rates are essential in attracting more savings. With more supply of credit, financial intermediaries promote investment and raise output growth through borrowing and lending. Also, King and Levine (1993a) find that higher levels of financial development are associated with faster economic growth and conclude that finance seems to lead growth. Neusser and Kugler (1998) and Choe and Moosa (1999) reach the same conclusion.

More specifically, the roles of stock markets and banks have been extensively discussed in both theoretical and empirical studies (See Levine (2003) for a survey of the literature). The key findings of studies are that countries with well-developed financial institutions tend to grow faster; particularly the size of the banking system and the liquidity of the stock markets tend to have strong positive impact on economic growth.

II.2 Empirical Literature

A substantial body of empirical work on finance and growth assesses the impact of the operations of the financial system on economic growth, whether the impact is economically large, and whether certain components of the financial system, e.g. banks and stock markets, play a particularly important role in fostering growth at certain stages of economic development.

Patrick (1966), in his work postulates a bi-directional relationship between financial development and economic growth. Ever since, a large empirical literature has emerged to test this hypothesis (see Levine, 1997 for survey). Two trends in this respect have emerged in the literature. The first tests the relationship between economic growth and financial development, adopting a single

measure of financial development and testing the hypothesis on a number of countries using either cross-section or panel data techniques (Erdal, et. al, 2007 for survey). The second trend examined the hypothesis for a particular country using time series data/technique, as done by Murinde and Eng (1994) for Singapore; Lyons and Murinde (1994) for Ghana; Odedokun (1998) for Nigeria; Agung and Ford (1998) for Indonesia; Wood (1993) for Barbados, and James and Warwick (2005) for Malaysia.

Other works by King and Levine (1993a, 1993b); Demetriades and Hussein (1996) and DemirgüçKunt and Maksimovic (1998), structured on the works of Bagehot (1873), Schumpeter (1912), Gurley and Shaw (1955), Goldsmith (1969), and McKinnon (1973), employed different econometric methodologies and data sets to assess the role of the financial sector in stimulating economic growth.

The mounting empirical research, using different statistical methods and data have produced remarkable results. First, the results have shown that countries with well-developed financial systems tend to grow faster, especially those with (i) large, privately owned banks that channel credit to the private sector, and (ii) liquid stock exchanges. The level of banking development and stock market liquidity exert positive influence on economic growth. Second, well-functioning financial systems ease external financing constraints that obstruct firms and industrial expansion. Thus, access to external capital is one channel through which financial development matters for growth because it allows financially-constrained firms to expand. The endogenous growth literature supports the fact that financial development positively affects economic growth in the steady state (Greenwood and Jovanovic (1990); Bencivenga and Smith (1991); Roubini and Sala-I-Martin (1992); Pagano (1993); King and Levine (1993b); Berthelemy and Varoudakis (1996); and Greenwood and Smith (1997)).

Over the last two decades, the literature has shown a growing body of new empirical approaches to treating the causality pattern based on time series techniques Gupta (1984); Jung (1986); Murinde and Eng (1994); Demetriades and Hussein (1996); Arestis and Demetriades (1997); and Kul and Khan (1999). In these studies, the focus is on the long-run relationship between financial sector development and real sector growth, using frameworks of bivariate and multivariate vector auto-regressive (VAR) models for different country samples. The outcome was that the causality pattern varies across countries according to the success of financial liberalization policies implemented in each country and the level of development of the financial sector.

The Nigerian economy has from the mid-1980s been moving towards increased liberalization, greater openness to world trade and higher degree of financial integration. This policy stance and other reform measures, particularly the banking sector consolidation exercise of 2004/05 have led to enormous build-up of capital from both domestic and cross-border sources. Nigeria is, therefore, a veritable case for investigating the link between finance and growth for at least two reasons. First, there has been considerable increase in the activities of the financial markets prior to the recent global financial crisis, particularly with regard to private sector credit and stock market capitalization. Credit to the private sector, stock market capitalization and the all-share value index were all on the upswing up until the onset of the crisis. Second, Nigeria has an interesting history of financial sector reforms. However, this proposal is not an agenda for this paper, given that this is only an overview of developments in the two sectors – financial and real.

III. Recent Banking Sector Reforms in Nigeria

III.1 Bank Consolidation 2004-2009

There has been a wave of restructuring and consolidation of the banking sector around the globe, particularly in the developed and the emerging market economies. This has been driven mainly by globalization, structural and technological changes, as well as the integration of financial markets. Banking sector consolidation has become prominent in most of the emerging markets, as financial institutions strive to become more competitive and resilient to shocks. It is also promoted by the desire to reposition corporate operations to cope with the challenges of an increasingly globalized banking system. It was based on the above premise that banking sector consolidation, through mergers and acquisitions, was embarked upon in Nigeria from 2004.

The Bank consolidation was focused on further liberalization of banking business; ensuring competition and safety of the system; and proactively positioning the industry to perform the role of intermediation and playing a catalytic role in economic development. The reform was designed to ensure a diversified, strong and reliable banking sector which will ensure the safety of depositors' money, play active developmental roles in the Nigerian economy, and be competent and competitive players in the African, regional and global financial system.

Following the banking sector consolidation, notable achievements were recorded in the financial sector among which was the emergence of 25 well-capitalized banks from the former 89 banks. The banks raised ₦406.4 billion from the capital market. In addition, the process attracted foreign capital inflow of

US\$652 million and £162,000 pound sterling. The liquidity engendered by the inflow of funds into the banks induced interest rate to fall significantly, while an unprecedented 30.8 per cent increase was recorded in lending to the real sector in 2005.

With a higher single obligor limit, Nigerian banks now had a greater potential to finance large value transactions. More banks now have access to credit from foreign banks, while the capital market deepened and consciousness about it increased significantly among the populace. The market became active and total market capitalization increased markedly. Ownership structure has been positively affected such that the problems of insider abuse and corporate governance have been reduced. Depositor confidence has improved due to "safety in bigness" perception by depositors. With virtually all banks now publicly quoted, there is wider regulatory oversight. With the inclusion of the Securities and Exchange Commission and the Nigerian Stock Exchange in the regulatory team, resources have been committed to the regulation of few and more stable banks in an efficient and effective manner. The banks have begun to enjoy economies of scale and, consequently, are passing on the benefit in the form of reduced cost of banking transactions. In general, the reform efforts had engendered stable macroeconomic environment evidenced by low inflation and relative stable exchange rates.

However, not long after, the global financial and economic crises came in 2007, leading to the collapse of many financial institutions across the globe. The financial crisis reduced the gains made in the Nigerian financial services sector from the banking sector consolidation exercise. The experience in the industry however, followed global trends. Following from the impact of the global financial crises, a section of the banking industry was badly affected as some banks were in grave condition and faced liquidity problems, owing to their significant exposure to the capital market in the form of margin trading loans, which stood at about ₦900.0 billion as at end-December 2008. The amount represented about 12.0 per cent of the aggregate credit of the industry or 31.9 per cent of shareholders' funds. Furthermore, in the wake of the high oil prices, a section of the industry that was excessively exposed to the oil and gas sector was also badly affected. As at end-December 2008, banks' total exposure to the oil industry stood at over ₦754.0 billion, representing over 10.0 per cent of the industry total and over 27.0 per cent of the shareholders' funds.

The excessive exposures resulted in serious liquidity problems exhibited by some of the banks towards the end of 2008. As part of its liquidity support, the CBN

Discount Window was expanded in October 2008 to accommodate money market instrument, such as Bankers' Acceptances and Commercial Papers. As at June 2009, the banks' total commitment under the Expanded Discount Window (EDW) was over ₦2,688.84 billion, while the outstanding commitments was over ₦256.0 billion, most of which was owed by less than half of the banks in operation. When the CBN closed down the EDW and, in its place, guaranteed inter-bank placements, it was observed that the same banks were the main net-takers under the guarantee arrangement, indicating that they had deep-rooted liquidity problems. Further investigation by the CBN identified eight interdependent factors as the main origin of the crisis in the banking sector.

These include:

- Sudden capital inflows and macro-economic instability
- Poor corporate governance and character failure
- Lack of investor and consumer sophistication
- Inadequate disclosure and lack of transparency
- Critical gaps in regulatory framework and regulation
- Uneven supervision and enforcement
- Weaknesses within the CBN
- Weaknesses in the business environment

III.2 On-going Banking Sector Reform

It was against this background that the CBN moved decisively to strengthen the industry, protect depositors' and creditors' funds, safeguard the integrity of the industry and restore public confidence.

In that regard, the CBN replaced the chief executives/executives directors of the banks identified as the source of instability in the industry and injected the sum of ₦620.0 billion into the banks in an effort to prevent a systemic crisis. Arrangements were also made to recover non-performing loans from banks' debtors, while guaranteeing all foreign credits and correspondent banking commitments of the affected banks. Furthermore, the Bank proposed the establishment of the Asset Management Corporation of Nigerian (AMCON). The AMCON Bill has already been passed by the National Assembly and signed into law by the President. The AMCON as a resolution vehicle is expected to soak the toxic assets of troubled banks. Members of the Board of Directors of AMCON have also been cleared by the Senate and inaugurated.

The CBN is also collaborating with the Securities and Exchange Commission (SEC) and the Nigerian Stock Exchange (NSE) to reduce the cost of transactions particularly bond issuance so as to diversify funding sources away from banks, as well as attract more foreign portfolio investors into the sector. Efforts are also being intensified towards strengthening regulatory and supervisory framework and enhancing the monitoring of the operations of the Deposit Money Banks (DMBs) to ensure that they remain safe, sound and healthy.

To further engender public confidence in the banking system and enhance customer protection, the CBN established the Consumer and Financial Protection Division to provide a platform through which consumers can seek redress. In the first three months of its operation, about 600 consumer complaints were received by the Division which was a manifestation of the absence of an effective consumer complaints resolution mechanism in banks. The CBN has also issued a directive to banks to establish Customer Help Desks at their head offices and branches. In addition, the CBN has commenced a comprehensive review of the Guide to Bank Charges with a view to making the charges realistic and consumer-friendly. Furthermore, the Consumer and Financial Protection Division is expected to commence a programme of consumer education and enlightenment and is also collaborating with the Consumer Protection Council on the review of the Consumer Protection Council Act No. 66 of 1992, to regulate and enforce discipline in the market.

The CBN has taken steps to integrate the banking system into the global best practices in financial reporting and disclosure through the adoption of the international Financial reporting Standards (IFRS) in the Nigerian Banking Sector by end-2010. This is expected to enhance market discipline and reduce uncertainties, which limit the risk of unwarranted contagion. The CBN is also closely collaborating with other stakeholders like the Nigerian Accounting Standard Board (NASB), Federal Ministry of Finance (FMF), NDIC, SEC, NAICOM, PENCOS, Federal Inland Revenue Service (FIRS), and the Institute of Chartered Accountant of Nigerian (ICAN), among others, towards ensuring a seamless adoption of IFRS in the Nigerian banking sector by 2012. These efforts are being pursued under the aegis of the Roadmap Committee of Stakeholders on the Adoption of IFRS in Nigeria inaugurated by the NASB and facilitated by the World Bank.

The universal banking (UB) model adopted in 2001, allowed banks to diversify into non-bank financial businesses. Following the consolidation programme, banks became awash with capital, which was deployed to multiples of financial

services. In effect, the laudable objectives of the UB Model were abused by operators, with banks operating as financial supermarkets to the detriment of core banking practices. To address the observed challenges, the CBN is reviewing the UB Model with a view to refocusing banks to their core mandate. Under the new model, banks would not be allowed to invest in non-bank subsidiaries, while banks with such investments would be required to either divest or spin-off the businesses to holding companies that will be licensed by the CBN as other financial institutions. The three classes of deposit money banks being proposed are: International banks, National banks and Regional banks.

III.3 Real Sector Financial Initiatives under the Current Banking Sector Reforms

Pursuant to the objectives outlined under the fourth pillar of the reforms and as part of its developmental function, the CBN has introduced new initiatives to enhance the flow of credit to the productive sectors of the economy.

III.3.1 ₦200 Billion Commercial Agricultural Credit Scheme (CACs)

The Scheme was established in 2009 by the CBN in collaboration with the Federal Ministry of Agriculture and Water Resources (FMA&WR). It is being funded through the issuance of FGN Bond worth ₦200 billion, by the Debt Management Office (DMO) in two tranches. The first tranche of N100 billion has been raised and passed on to participating banks for on-lending to farmers. Loans made under this scheme are at single digit interest rate subject to a maximum of 9.0 per cent while the CBN bears the interest subsidy at maturity. The scheme was initially to promote commercial agricultural enterprises but was later amended to accommodate small-scale farmers through the on-lending scheme of the state governments. All the 24 banks in the country would participate in the administration of the scheme, but only 7 banks are involved, thus far. As at end-October 2010 a total of about ₦90.36 billion has been disbursed to eleven banks including 15 state governments for financing 94 projects. Other developmental functions of the CBN that have impacted on the agricultural sector are the Agricultural Credit Guarantee Scheme and its Trust Fund Model, Interest Drawback Programme and the establishment of the Microfinance Banks.

III.3.2 ₦500 Billion Development Bond

As part of the efforts by the CBN to show the way towards enhanced financing of the real sector and infrastructure projects, and improve credit flow to the sector, a ₦500.0 billion fund was established out of which ₦300 billion is earmarked for Power/Infrastructure projects and Airlines, and ₦200.0 billion for the Refinancing/Restructuring of banks' existing loan portfolios to manufacturers/small and medium enterprises (SMEs).

III.3.3. ₦200 Billion Small and Medium-Scale Enterprises Guarantee Scheme (SMECGS)

The ₦200 billion Small and Medium-Scale Enterprises Guarantee Scheme (SMECGS) established by the CBN in 2010 aims at promoting access to credit by SMEs in Nigeria. The scheme provides guarantees on loans by banks to the sector in order to absorb the risk element that inhibit banks from lending to the real sector. The activities covered under the scheme include manufacturing and agricultural value-chain; SMEs with assets not exceeding ₦300 million and labour force of 11 to 300 staff; and processing, packaging and distribution of primary products.

The main objectives of the Scheme are to: fast-track the development of SME/manufacturing sector of the Nigerian Economy by providing guarantees; set the pace for industrialization of the Nigerian economy; and increase the access to credit by promoters of SMEs and manufacturers. The maximum amount to be guaranteed under the scheme is ₦100 million which can be in the form of working capital, term loans for refurbishment, equipment upgrade, expansion and overdraft. The guarantee covers 80 per cent of the borrowed amount and is valid up to the maturity date of the loans, with maximum tenure of 5 years.

All deposit money and development banks are eligible to participate in the scheme and the lending rate under the scheme should be the prime lending rate of the banks since the CBN is sharing the credit risk with the banks by providing guarantee.

III.3.4 Nigerian Incentive-based Risk Sharing System for Agricultural Lending (NIRSAL)

Despite the plethora of financing schemes, the issue of adequate, affordable and timely access to credit by Nigerian farmers remains a major challenge. For example, between 2006 and 2009, the agricultural sector attracted on average 2.1 per cent of the total credit to the economy in contrast to its average contribution of 42.2 per cent to the GDP over the same period. The low credit to the sector by the banking industry could be attributed to a number of reasons, notable among which are the high risk inherent in the sector and the perception of the sector as non-strategic to their business models. Hence, as long as these concerns linger, the issue of financing agriculture in Nigeria would require more than just providing funds to the sector. It is against this background that a new financing framework, the Nigerian Incentive-based Risk Sharing System for Agricultural Lending (NIRSAL) is being introduced.

This model of financing agriculture is different in many ways from the current financing models which have not yielded the desired impact of making adequate credit available to the sector. NIRSAL is a demand-driven credit facility rather than the current supply-driven funding. It would adopt a value-chain approach to lending as banks would be free to choose which part of the value chain they would be interested in lending to. It would build the capacity of the banks to engage and deliver loan; reduce counterpart risks facing banks through innovative crop insurance products; reward performance in agricultural lending; and would be managed with performance-based incentives.

NIRSAL would be tailored along the already developed model of the Impact Investing Fund for African Agriculture (IIFAA) based on Nigerian's financial and agricultural development requirements. It would pool together the current resources in CBN's agricultural financing schemes and other investors' funds and transfer these into the five components of the programme but managed outside of the CBN. In other words, existing agricultural support frameworks like CACS, ACGS, ACSS and NAIC, etc, would be assessed, modified and integrated into five components.

The scheme aims at reversing the trend of low credit to the agricultural sector by encouraging more banks to lend to the sector through an incentive based system. The programme would ensure that hitherto unproductive public capital will translate to more productive output by using it to create incentives for banks to be more involved in agricultural lending, increase market absorptive capacity, reduce lending risk as well as help banks to understand the sector better. Furthermore, it would help banks build capacity to develop sustainable term financing and affordable loan products to promote commercially oriented agriculture for small holder farmers and businesses. It will also develop efficient financial delivery system that would serve the need of medium and large scale farmers. The programme set out to stimulate a new form of strategic partnership and alliance between banks to increase lending, reduce the transaction cost and establish a sustainable financial delivery platform into rural areas.

Specifically, the objectives of the programme include:

- Stimulate innovations in agricultural lending
- Encourage banks that are lending to the sector
- Eliminate state dependency by banks for deploying loanable funds to agriculture
- Leverage DMBs balance sheet for lending into Agriculture; and

- Ensure risk-sharing approach that will build a business approach where banks share in the risk of lending to the sector

In achieving these objectives, there would be five integrating components to ensure increased bank credit to the agricultural sector, ensure systemic change and reward performance based on evidence using market-driven incentives. These five pillars would work together in an integrative way to change the way banks lend to agricultural sector. The five major components of this programme are: Risk Sharing Facility (RSF), Insurance Components (IC), Technical Assistance Facility (TAF), Bank Incentive Mechanism (BIM) and Agricultural Bank Rating System (ABRS). These components are further explained below:

The Risk Sharing Facility (RSF) is a risk-tool box that would serve as a framework for negotiation between the programme and the participating banks. It would be used to deploy different risk sharing instruments to reduce the risk of lending to the agricultural sector. This would comprise first loss and share loss arrangements, the volume of lending, the part of value-chain that the bank would be willing to lend to, the term of lending and the type of bank as well as experience and capacity for agricultural lending.

The Insurance Component (IC) would identify existing insurable risks and solution coverage, assist in developing such solutions and link such products to the loan provided by the banks to the beneficiaries.

The Technical Assistance Facility (TAF) would be used to assist banks that have demonstrated interest and commitment to lending to small-holding agriculture. It would help to build capacity of the banks to lend and develop delivery platform in support of agricultural lending. It would also assist in building capacity of small-holder farmers and help them in managing markets and financial activities.

The Bank Incentive Mechanism (BIM) would motivate banks to lend to the agricultural sector. The BIM would define appropriate incentive mechanism to encourage banks to lend to the sector without creating moral hazard. This would be done through lower guarantee fees for use of services under the scheme.

The Agriculture Bank Rating System (ABRS) would rate banks according to their level of engagement in agricultural development. The rating would be based on banks performance in lending to the agricultural sector and the impact of the lending on food security, rural development and income. Banks with higher rating would be given more incentive through BIM to encourage more lending to the

sector. Provisional estimates for funding the various components are currently put as follows: RSF (US\$300 million – with a goal of leveraging up to US\$3 billion), TAF (US\$90 million), BIM (US\$100 million) and ABRS (US\$10 million). The CBN as a founding and strategic investor would play a crucial role in creating long term systemic change in agriculture financing.

The blueprint for the current reforms is built around four pillars namely; enhancing the quality of banks, establishing financial stability, enabling healthy financial sector evolution and ensuring that the financial sector contributes to the real economy. Each of these pillars is discussed in detail as follows.

Enhancing the Quality of Banks

Under this pillar, the CBN has initiated a five-part programme that would enhance the operations and the quality of banks in Nigeria. It consists of industry remedial programmes to tackle the fundamental causes of the banking sector crises, implement risk-based supervision, reform the regulatory framework, as well as enhance provision for consumer protection and internal transformation of the CBN. This initiative would go a long way in enhancing credit to the real sector of the economy. In order to address the failure of corporate governance in the industry, the CBN will also establish a specialist function centered on governance issues to ensure that governance best practices are imbibed in the industry.

Establishing Financial Stability

This pillar focuses at strengthening the Financial Stability Committee within the CBN as well as establishing a hybrid monetary policy and macro-prudential rules. It also includes the development of directional economic policy and counter-cyclical fiscal policies by the government and the further development of the capital market as alternative to bank funding. When financial stability is established, the banking sector would be the major driver of economic activities and a significant channel for capital flows into the real economy.

Enabling Healthy Financial Sector Evolution

Under this pillar, attention would be given to creating an appropriate banking industry structure, the cost structure of banks, the role of the informal economy and providing banking infrastructure such as credit bureau and registrars. The CBN would review the basic one-size-fits-all model of banking in addition to reviewing the universal banking model, which would be replaced by the specialized banking model, where three licence types would be issued. The first is the commercial banking licence issued to organizations for the purpose of regional, national or international banking. The second is the specialized banking licence for microfinance banks and mortgage banks. The third licence is for

investment banking, which extends to development banking. These developments in the near-term would make it possible to have international, national, regional, mono-line and specialized banks, with different capital requirements proportionate to the depth of their activities.

Ensuring the Financial Sector Contributes to the Real Economy

The rapid growth experienced in the financial sector in Nigeria has not impacted positively on the real economy as much as anticipated. Development finance institutions set up for specific purposes, such as agricultural finance, housing finance, trade finance, urban development, did not achieve their stated mandates. Also, credit flow from the deposit money banks to the real economy has been grossly inadequate. Thus, the need for creating financial accommodation for economic growth through initiatives such as development finance, foreign direct investment, venture capital and public-private partnerships has become very imperative.

Under this pillar, the CBN has outlined measures to ensure that the financial sector contributes meaningfully to the development of the real sector. These include:

- (i) Leverage on the role of the Bank as adviser to the government on economic matters, to ensure that the financial sector impacts on the real economy;
- (ii) Take the lead in measuring more accurately, the relationship between the real sector and financial sector, as well as the transmission mechanism;
- (iii) Evaluate continually the effectiveness of existing development finance initiatives such as agricultural credit and import-export guarantees;
- (iv) Take the lead in encouraging examination of critical issues for real sector developments;
- (v) Encourage further studies on the potential of venture capital and private-public partnership initiative for Nigeria in the real sector; and
- (vi) Cooperate with state governments to run pilot programmes in positively re-directing the financial sector's contribution to the real sector.

With the above mentioned initiatives, the current banking sector reforms of the CBN is expected to contribute significantly to the development of the real sector of the economy.

III.5 Financing Initiatives under the Current Reforms

Pursuant to the objectives outlined under the fourth pillar and as part of its developmental function, the CBN has introduced new initiatives to enhance the flow of credit to the productive sectors of the economy.

The new incentives include:

III.5.1 ₦200 Billion Restructuring/Refinancing to the Manufacturing Sector/SMEs

In a bid to unlock the credit market, the CBN provided ₦500 billion out of which ₦200 billion is for re-financing/re-structuring of banks' existing loan portfolios to the manufacturing sector and SMEs. The investment is in the form of debenture stock to be issued by the Bank of Industry (BOI). The main objective of the fund is to fast-track the development of the manufacturing sector by improving access to credit by manufacturers as well as improving the financial position of the DMBs. The category of facilities under the fund include long-term loans for acquisition of plant and machinery, refinancing of existing loans, resuscitation of ailing industries, working capital and refinancing of existing lease. The loan amount for a single obligor is the maximum of ₦1 billion in respect of re-financing/re-structuring with an interest rate of 7.0 per cent payable on quarterly basis. All the 24 banks in the country as well as Development Finance Institutions (DFIs) excluding the Bank of Industry (BOI) are to participate in the fund. Thus far, the sum of ₦130.2 billion has been disbursed from the fund with ₦117.7 as term loan while the balance of ₦12.5 billion was disbursed as working capital.

IV. Developments in the Real Sector (2005-2009)

Table 1 below shows credit by the banking sector to selected sub-sectors in the real sector. For the period 2006–2009, total credit to the economy from the banking sector rose from ₦2,535.4 billion in 2006 to ₦8,769 billion in 2009 and averaged ₦5,830.7 billion during the period. Credit to real sector activities, agriculture, solid minerals, manufacturing, real estate, public utilities and communication on the average, accounted for 41.8 per cent of total credit, while general commerce, services and government received the balance of 58.2 per cent. The share of manufacturing in total credit to the economy fell sharply, from 16.9 per cent in 2006 to 10.6 per cent in 2007, before rising to 12.6 per cent in both 2008 and 2009 (table 2). Manufacturing average share was 13.2 per cent and had the highest credit allocation. It was followed by solid minerals and communication, the shares of which averaged 11.1 and 7.7 per cent, respectively. The average for agriculture was abysmal at 2.1 per cent.

**Table 1: Credit to Selected Sectors in the Real Sector by the Banking Sector
(N' Billion)**

Credit By Sector	2006	2007	2008	2009	Average
Total Credit to the Economy	2,535.37	4,606.56	7,411.43	8,769.34	5,830.68
Agriculture	56.50	149.58	106.35	136.89	112.33
Manufacturing	427.28	487.58	932.80	1,109.86	739.38
Solid Minerals	255.01	490.71	846.94	1,083.99	669.16
Real Estate	148.49	285.82	466.80	756.06	414.29
Public Utilities	23.71	26.03	45.84	40.51	34.02
Communications	191.49	321.01	539.15	817.90	465.14
General Commerce	601.45	735.80	1,229.66	1,006.31	893.31
Finance & Insurance	116.02	432.36	714.47	995.40	564.56
General	600.23	1,516.23	2,384.53	2,529.20	1,757.55
Government	115.19	170.43	144.88	293.14	180.91

Source: Central Bank Nigeria

Table 2: Percentage Share of Credit to Selected Sectors of the Real Sector

Sectors	2006	2007	2008	2009	Average
Agriculture	2.23	3.25	1.43	1.56	2.12
Manufacturing	16.85	10.58	12.59	12.66	13.17
Solid Minerals	10.06	10.65	11.43	12.36	11.12
Real Estate	5.86	6.20	6.30	8.62	6.75
Public Utilities	0.94	0.57	0.62	0.46	0.65
Communications	7.55	6.77	7.27	9.33	7.73
General Commerce	23.72	15.97	16.59	11.48	16.94
Finance & Insurance	4.58	9.39	9.64	11.35	8.74
General	23.67	32.91	32.17	28.84	29.40
Government	4.54	3.70	1.95	3.34	3.39

A study by the CBN in 2010 on "Enhancing Bank Credit flow to the Real Sector of the Nigerian Economy" showed that 24.03 per cent of the total fund requirement of firms came from bank loans and advances.

Table 3: Company Sources of Fund

	Company Fund	Equity	Loans & Advances	Others	Total
2006	3,167.09	632.00	1,936.78	7,741.87	13,477.74
2007	3,235.50	632.00	2,745.17	13,951.35	20,564.02
2008	4,338.65	1,268.00	5,652.45	18,965.60	30,224.70
2009	6,150.42	1,318.00	2,004,967.50	2,022,230.57	4,034,666.49
	(As % of Total)	(As % of Total)	(As % of Total)	(As % of Total)	
2006	23.50	4.69	14.37	57.44	
2007	15.73	3.07	13.35	67.84	
2008	14.35	4.20	18.70	62.75	
2009	0.15	0.03	49.69	50.12	
Average	13.43	3.00	24.03	59.54	

Table 4: Criteria For Considering Loan Applications (per cent)

	Value of Collateral	Project Viability	Development Potential	Repayment Period	Managerial Capability	Character of Borrower	Risk Borrowers Sector
1	30.0	5.0	40.0	0.0	5.0	10.0	5.0
2	20.0	10.0	25.0	10.0	10.0	5.0	15.0
3	5.0	5.0	10.0	5.0	55.0	5.0	15.0
4	5.0	30.0	0.0	10.0	25.0	15.0	20.0
5	20.0	25.0	5.0	20.0	0.0	5.0	35.0
6	15.0	20.0	0.0	45.0	5.0	10.0	5.0
7	5.0	10.0	20.0	10.0	0.0	50.0	5.0

Table 5: Demand and Supply of Credit to Firms (Number)

	No of Firms that demanded loans	No of Firms that received loans	Firms that Demanded Loan as(per cent) of Total	Firms that Received Loan as (per cent) of Total
2006	4	3	21.05	15.79
2007	8	3	42.11	15.79
2008	9	5	47.37	26.32
2009	5	5	26.32	26.32
	Number of Firms Covered	19		

Further analysis shows that funding from the banks accounted for only 14.4 per cent of total funds in 2006, 13.4 per cent in 2007, 18.7 per cent in 2008 and 49.7 per cent in 2009. The result of the survey also gave indications of how real sector enterprises fared in terms of attracting bank credits. The survey showed that banks satisfied an average of only 15.8 per cent of the number of loan requests made by real sector firms in 2006 and 2007, and 26.3 in 2008 and 2009.

Furthermore, the study tried to establish the credit gap and explain why banks are reluctant to lend to the real sector in Nigeria and found that, in credit packaging, bank treasurers evaluate the safety of their funds, the liquidity of the balance sheets and the profitability of proposed ventures. Safety has more weight the smaller the asset base, while the need to ensure liquidity depends on the customer base and the frequency of transactions. Profitability compensates shareholders and guarantees going concern for the bank. Since the liberalization of the credit market in Nigeria under the Structural Adjustment Programme, the status of Preferred Sector was stripped off the real sectors and so the compulsory funding from banks dried up. Moreover, the market-determined interest rates have tended to exclude the real sectors, especially, agriculture, from the credit market. An assessment of the National Accounts of Nigeria indicates that the real sector contributes over 60.0 per cent to the gross domestic product (GDP), but attracts only about 40.0 per cent of total credit. Worse still is the case of agriculture which contributes over 40.0 per cent of the GDP (Table 6) but attracts less than 2.0 per cent of total credit. Banks were reluctant to lend for real sector activities for reasons such as poor managerial ability, ability to repay, unfavourable growth prospects in the sub-sector, inherent risk and insufficient collateral, etc.

Table 6: Percentage Share of Selected Sectors of the Real Sector in GDP

Sectors	2005	2006	2007	2008	2009
Agriculture	41.19	41.72	42.01	42.13	41.85
Manufacturing	3.79	3.91	4.03	4.14	4.20
Solid Minerals	0.27	0.28	0.30	0.32	0.33
Real Estate	1.52	1.59	1.67	1.75	1.82
Public Utilities	3.58	3.54	3.49	3.42	3.31
Communications	1.53	1.91	2.38	3.00	3.74

Table 7: Selected Real Sector Indicators

	2005	2006	2007	2008	2009	Average 2005-2009
Real GDP Growth Rate	6.51	6.03	6.45	5.98	6.90	6.37
Non-oil GDP Growth Rate	8.59	9.41	9.52	8.95	8.61	9.02
Agricultural Sector Growth Rate	7.07	7.40	7.19	6.27	6.21	6.83
Industrial Sector Growth Rate	1.71	-2.51	-2.23	-3.41	0.83	-1.12
Manufacturing Growth Rate	9.61	9.39	9.57	8.89	8.58	9.21
Inflation Rate (per cent) Year-on-Year	11.6	8.5	6.6	15.1	13.9	11.14
Capacity Utilization (per cent)	54.8	53.3	53.5	52.6	55.01	53.84
Crude oil Price (US\$)	55.43	66.38	74.96	101.15	62.08	72.00

Source: CBN Statistical Bulletin and Annual Report and Statement of Accounts, Various Issues

A review of some selected real sector indicators provides a picture of the performance of the real sector in the face of the banking sector reforms. Real output growth has been modest over the review period, averaging 6.37 per cent. Growth rates of the agriculture and manufacturing sectors have been relatively stable. Inflationary pressures moderated between 2005 and 2006, before assuming an upward trend for the rest of the period. Average capacity utilization in the manufacturing sector averaged 53.84 per cent for the period.

V. Challenges of Real Sector Lending

The major challenges to real sector financing from banks have been identified as unfavorable macroeconomic environment, cumbersome documentation process, inadequate long-term finance, lack of data base on borrowers and poor infrastructure.

Addressing the Challenges of Lending to the Real Sector

- (i) A stable macroeconomic environment encourages lending. Thus, the Bank should ensure minimal price and exchange rate fluctuations which are proxies for macroeconomic stability. Related to macroeconomic stability is the need for effective coordination of monetary and fiscal

policies which could be assured through regular liaison with the Debt Management Office, Budget Office and the Accountant General's Office. Frequent and focused meetings of the fiscal and monetary authorities would ensure consistency in government pronouncements and economic policy measures, and this would build confidence among industrialists who say that frequent policy reversals scare them from borrowing.

- (ii) Most business people opine that the documentation process for obtaining loans in Nigeria is too cumbersome and discourage prospective borrowers. The Bank could through the mounting of workshops on documentation requirements encourage DMBs to reduce the documentation processes for loans. The issue of borrower identification which gives rise to multiple documentation requirements could also be solved by the Bank partnering with relevant agencies to create a database for all industrialists.
- (iii) The various financing scheme established by the CBN should be monitored and evaluated on half-yearly basis to ensure their efficient and effective implementation.
- (iv) Borrower identification is also a major consideration for banks. The CBN should encourage and help equip the credit bureau which will warehouse data concerning firms and their credit portfolios. The bureau's data base should be electronic and remotely accessible to all stakeholders.
- (v) In addition to iv above, to be able to assign unique identification to all Nigerians, the Bank should partner with the agency responsible for the National Identity Cards Scheme to complete the project. It has to be emphasized that the new cards should be chip-based and consolidated in a database that all authorized persons and corporates could access as and when needed.
- (vi) The Bank should increase communication with the populace, especially as it affects the various schemes which are available for industries and small borrowers.
- (vii) Management should consider re-evaluating the funding schemes, like the ACGSF, SMEEIS, CACS, etc to ascertain the reasons why they are not effective and take steps to improve on their service delivery. In particular,

SMEIS should return to being mandatory to the banks as it performed relatively well before it was made optional.

- (viii) Government should take urgent steps to fix the infrastructural facilities in the economy to reduce the burden of providing them by the private sector, reduce their operational costs and make them competitive. An approach that could help is to raise development bonds earmarked for infrastructure in the energy and transport sectors, in particular. For electricity, the national grid could be dismantled and regional electricity boards set up to manage the transmission and distribution operations, as generation is largely privatized. This will engender competition and efficiency. A complementary approach is to encourage the promotion of the cluster system in which infrastructures are provided at designated sites for the benefit of industrialists.
- (ix) Lack of managerial expertise is echoed by both banks and firms as impediment to lending/borrowing. The government, through the Ministry of Labour and Productivity, should institute more skill acquisition programmes for entrepreneurs, to inculcate in them corporate governance and managerial skills.
- (x) With regard to collaterals, the government should fast-track its land reforms to ensure that land owners are enabled to secure Certificate of Occupancy from governments which will make the banks more confident in granting loans to the firms.

VI. Conclusion

The current priority attention being accorded the real sector is well deserved. This is because the sector has great potentials to be the engine of growth in Nigeria. In the face of rising unemployment and high poverty levels, growth generated from this sector, particularly agriculture, is pro-poor and most desired. It is capable of lifting the greatest number of people above the poverty level. While efforts are being made to address the credit bottlenecks are very commendable, there is the need for complementary reforms to provide the other critical elements. These include improving power, transportation, water, and all other ancillary issues which account for under-performance in the sector.

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Banking Sector Reforms and the Manufacturing Sector: The Manufacturers' Association of Nigeria Perspective

Jide A. Mike*

I. Introduction: The Real Sector of the Economy

The Real Sector is the segment of the economy where high productive activities are carried out and comprise:

- (i) Industry:
 - Manufacturing
 - Mining and Quarrying
 - Electricity generation
- (ii) Agriculture
- (iii) Transport and Communication
- (iv) Trade and Commerce
- (v) Services
- (vi) Building and Construction
- (vii) Oil and Gas

However, the manufacturing sector is expected to dominate, shape and define the core path of industrialization all over the world. The sector is reputed to be an important engine of growth, an antidote for unemployment; a creator of wealth, and the threshold for sustainable development.

II. Historical Overview of Nigeria's Manufacturing Sector

II.1 Pre-Independence Era

Before independence in 1960, the Nigerian economy was characterized by:

- Agrarian activities both in production for domestic consumption and export.
- Near absence of industrial activities as industrialization was not part of the colonial economic agenda.
- Production of primary raw materials for foreign industries, and importation of manufactured goods.

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II.2 Post-Independence Economic Policies

Upon attainment of independence, the post-independence governments embraced the policy of transformation of the country into a modern industrial economy with emphasis on:

- High priority on rapid industrialization as Nigeria's development objectives in the First National Plan (1962-1968).
- (i) Importation of finished products was discouraged to encourage locally manufactured products through import substitution strategy.

Unfortunately, our local industries are still heavily import-dependent in sourcing raw materials and capital goods. However, the emergence of the oil boom in the 1970's made huge foreign exchange available for further massive importation of industrial inputs. With the establishment of many industries, most industrial groups imported almost all of their raw materials and machinery/spare parts. The contribution of manufacturing to gross domestic product (GDP) rose significantly to about 9.5 per cent in 1975 from a paltry contribution of 3.2 per cent in 1960.

- (ii) The Indigenization Policy (Decrees) of 1972 and 1977, as amended, were promulgated to address the obvious foreign domination of the Nigerian industrial landscape. However, the oil glut of the early 1980s spelt the doom for many of these high import-dependent industries. The then prevailing policies of import licensing as well as interest and exchange rates controls resulted in acute shortages of industrial inputs with adverse consequences on industrial production and capacity utilization. Many industries were closed down leading to massive retrenchments, with the resultant socio-security problems. Between 1982 and 1986, all macroeconomic indicators viz: oil revenues, naira exchange rate and foreign reserves posted negative trends in their movements. These led to the enthronement of a regime of rationing of foreign exchange among manufacturers and other users.
- (iii) The Structural Adjustment Programme (SAP)
The SAP was adopted in 1986, as reform measures meant to:
 - Reverse the downwards trends in the economy
 - Widen our industrial base
 - Promote stimuli for increased export

- Provide incentives for manufacturing to enhance its value-added and contributions to the GDP
 - Provide greater employment opportunities
 - Improve the technological skills and capacities available in the country
 - Increase private sector participation in manufacturing through foreign direct investments (FDI) and local entrepreneurial activities
- (iv) Trade liberalization as a major policy option of SAP was blindly applied by the government in order to make the sector competitive but without providing a conducive business environment with the following adverse consequences:
- High deterioration in the naira exchange rate leading to high costs of domestic production
 - With high cost and scarcity of industrial raw materials, manufacturing capacity utilization and production fell drastically
 - Manufacturing employment was not left out in the decline
 - The small and medium enterprises that SAP was meant to encourage became victims of the reform agenda
 - The much canvassed inflow of foreign investments that would accompany the SAP regime became a mirage
 - The policy not only killed the manufacturing sector, but affected its contributions to the GDP. For instance, the sector's contribution to the GDP reduced from 9.5 per cent in 1975 to 6.65 per cent in 1995
 - During the SAP period, the government completely divested itself of holdings of 67 companies and slated others for partial or full commercialization and for partial or full privatization depending how strategic they were considered to the economy

II.3 Post-Structural Adjustment Programme Era

Since the post-SAP period, the manufacturing sector has not experienced meaningful growth. The main feature of the Nigerian economic terrain is the steady de-industrialization as reflected in the high mortality rate of manufacturing outfits. The number of registered manufacturing firms with the Manufacturers'

Association of Nigeria (MAN) dropped from 4,850 in the early 1980s to 2,000 in 2010. Capacity utilization was 70.1 per cent in 1980 but declined rapidly to 29.3 per cent in 1995 before rising gradually (with fluctuating trends) to 52.8 per cent in 2005 and 48.0 per cent in 2009. The share of manufacturing in the aggregate GDP declined from 5.3 per cent in 1981 to 4.1 per cent in 1993, 3.4 per cent in 2005, and marginally increased to 4.1 per cent in 2009. Similarly, direct manufacturing employment declined over the years. A survey of about 300 manufacturing companies carried out by MAN showed that 2,752,832 people were engaged by the sector in 2001; 1,043,982 in 2005, and 1,026,305 in 2008. These trends are the consequential result of a number of problems confronting the sector, among which are:

- Near collapse of critical social and economic infrastructure
- High bank lending rates which are a great disincentive to new investment and mortal killer of existing ones particularly the SMEs
- Lack of long-term investible funds for manufacturing activities.
- Government policy inconsistency
- Deepening weak aggregate consumer demand
- Massive influx and dumping of all kinds of imported finished goods
- Multiplicity of taxes and levies
- Low government patronage of locally manufactured goods
- Insecurity of life and property, etc.

The problems highlighted above represent a significant deviation from the characteristics and requirements of a conducive business environment that the real sector needs to perform its role as the engine of growth and development.

II.4 Countries' Experiences on the Roles of Banks

A well-established and efficiently functioning banking system is the "brain" of the economy.

Banks offer institutional mechanism through which resources can be mobilized and directed from less essential uses to more productive investments. The role of banking institutions in the efficient allocation of available resources is for capital formation and accelerated growth. In America, Japan and Germany, the banking sector initiates and coordinates long-term industrial strategies by playing a more dynamic and active role in the industrialization and overall development of their economies – growth-inducing model. These countries have achieved a high level of economic development. South Korea, Malaysia, Taiwan and lately China, by adopting the growth-inducing model of banking are emerging as

important world players in areas of industrialization. In these countries, the financial intermediaries act to stimulate entrepreneurial ability and encourage enterprises through extension of both financial and non-financial services to economic units as deemed necessary. The British banking system as well as those modelled on it adopted the passive or growth-induced model. This is a situation where banks look forward to the time when other non-financial problems in a country's development are removed and the investment atmosphere is now conducive for the financing of growth-inducing activities. The banks usually not only own large parts of industry, but also provide much of their financial advice, together with the share of their credit facilities.

III. Banking Sector Reforms: The Manufacturers' Association of Nigeria Perspective

III.1 Pre-Consolidation Experience

The Nigerian banking system, patterned after the British system, started off as a weak and passive financial system during the colonial era, directed mainly towards the needs of the expatriate administrators and merchants. The task of financing the development of the Nigerian economy was left to the post-independence era. Prior to the 1986 deregulated SAP regime, interest rates were fixed administratively by the CBN for socially optimum resource allocation, to promote orderly growth in the financial market and facilitate flow of credit to the preferred sectors like manufacturing, agriculture, and infrastructure. The motivating force was the compelling need to attract investments required to grow the economy, create employment opportunities, increase output and, generally, set the economy on the path of economic development.

The modest achievements recorded by the manufacturing sector in the 1970s and up to the early 1980s could partly be attributed to this generous monetary policy. The sector recorded 9.5 per cent contribution to GDP and over 70.0 per cent average capacity utilization in 1975. With the liberalization of interest rates in 1987, coupled with the abolition of the administrative sectoral allocation of bank credit, the field was now left to the market interplay of interest rate determination and credit allocation. The role of the CBN with regards to interest rates was confined to the fixing of the Minimum Rediscount Rate (MRR), now known as the Monetary Policy Rate (MPR). Experience has shown that since the post-SAP market reforms, lending rate has been on the upward trend.

Manufacturers and other real sector operators are of the view that the high lending rates in the country are not business-friendly and do not promote economic development. Lending rates at present vary between 15.0 per cent

and 25.0 per cent (excluding other ancillary charges) and are too excessive for a developing economy like ours. This is contrary to what is obtainable in developed economies of the world where lending rates are single digit and even tilted towards zero per cent at the peak of the global financial crisis in those countries. Notwithstanding the fact that the Nigerian economy is currently experiencing high inflation rate to the tune of 13.8 per cent which in theory induces high lending rate because of the need to realign the real interest rate on deposits, the wide margin between deposit and lending rates appears uncomfortable and unacceptable to manufacturers.

Taking the average maximum lending rates of banks to the manufacturing sector (20.9 per cent) and the average rate on all categories of deposits (2.2 per cent), the wide disparity of 18.8 per cent is not justifiable. Banks in Nigeria build in unnecessary and, sometimes, avoidable costs as a way of increasing lending rate thereby making it impossible to comply with the requirement of the Central Bank of Nigeria (CBN) which states that the banks should charge a maximum of 4 per cent above the Monetary Policy Rate (MPR) as lending rate. This they do under the guise of liberalized interest rate regime. The analysis contained in the Nigerian Banks Financial Transparency Report 2010 which shows a total wage bill of ₦265 billion for staff strength of 59,807 of the 14 quoted banks in 2009 is food for thought. This amounted to an average of ₦4 million per staff. The CBN effort in getting the banks to publish their interest rates on deposits and lending has not moderated the high lending rates in Nigeria. The negative effects of high lending rates on economic development in Nigeria cannot be over-emphasized.

III.2. Post-Consolidation Experience

In 2004, the CBN directed the banks operating in Nigeria to recapitalize from a capital base of ₦5 billion to ₦25 billion. The recapitalization exercise led to a reduction in the number of operating banks from 89 to 24 well-capitalized banks. Expectations of a new dawn were high particularly in the real sector, given the new financial muscle of the recapitalized banks to finance both low and high ticket operations, thereby serving as a pivot of economic development. Lending rate was expected to fall with the obvious high liquidity of the banks. It is pertinent to note that our economy is yet to fully reap the benefits of the recapitalization in the banking industry. The agricultural sector and the SMEs that were supposed to enjoy the special consideration and sympathy of the post-consolidated banks were jettisoned on the excuse of high perceived risks and lack of realizable and adequate collateral.

These key sectors play fundamentally important roles in the economy of any nation. Most economies of the world are developed either through effective investments in real sector or trade liberalization; unfortunately Nigeria is not finding things easy in these two major areas. The forage of our banks with their huge capital into stock market speculative activities through unbridled margin loans left a lot of them in comatose when the bubble burst. The CBN had to come up with both financial and managerial rescue packages in order to avoid a total run on the economy. Those banks that still have the liquidity developed a high aversion for credit creation, thus, leading the economy into a credit squeeze situation.

IV. CBN Real Sector Intervention Fund

The ₦500 billion intervention fund was established in a bid to unlock the credit market. The sum of ₦300 billion was approved and earmarked for independent power projects for industrial clusters and the aviation industry while the remaining ₦200 billion was meant for the refinancing/restructuring of manufacturers' existing loans from the banks. The intervention fund was accompanied with a generous interest rate of 7.0 per cent per annum and long repayment tenor of between 10-15 years. The establishment of ₦200 billion Small and Medium Scale Enterprises Credit Guarantee Scheme is to encourage banks to lend to the financially-starved SMEs.

The risk exposure of banks under this scheme is guaranteed to the tune of 80.0 per cent, with lending banks granting credit at its prime rate of interest under a five-year tenor. This is a novel approach adopted by the CBN in redeeming the real sector. Manufacturers' Association of Nigeria has expressed gratitude to the CBN Management for this daring move, the first of its kind in any developing country. This bold initiative should set standards for monetary intervention in the real sector, and should ultimately define the relationship between the banking sector and the real sector. For a technologically-empowered manufacturing sector in Nigeria, long-term and cheap funds of this intervention nature is needed to finance the research into and production of capital goods and industrial plants. It is time to move our underdeveloped techno-economy from raw material enclave to capital goods production through appropriate financing and other macro-economic inducing policies. There is the need to enlarge the phases and scope of the CBN intervention fund. In view of the limited CBN intervention fund, many manufacturers are unable to access the refinancing scheme.

The scheme should not be limited to refinancing/restructuring alone, but should also embrace working capital and loans to resuscitate ailing industries. MAN

enjoins CBN to exert her moral-suasion on the banks in order to make them responsive to the ₦200 billion SME Credit Guarantee Scheme operation as we have observed that they are at present apathetic to the scheme. MAN also believes that with diligent supervision of these laudable programmes, it is expected that the manufacturing sector will begin to experience positive turn around and be better placed to play its developmental roles of employment generation, poverty reduction, wealth creation and meaningful contribution to the nation's GDP.

V. Financing the Manufacturing Sector for the Attainment of Vision 20:2020

For a manufacturing sector that will contribute over 25.0 per cent to the envisaged US\$900 billion GDP in year 2020, more pragmatic approach must be adopted by the coalition of the CBN, the Deposit Money Banks and other Development Finance Institutions.

(a) Sector Financing

- Appropriate measures should be put in place by the CBN to ensure the utilization of the vast resources in the pension, National Health Insurance, Insurance Fund and the National Housing Fund Schemes.
- Ensuring that all Deposit Money Banks are quoted on the stock exchange so that they can play active roles in the bond market for on-lending to the real sector.

(b) Infrastructural Financing

- The CBN noble example of IPP financing for industrial clusters needs to be emulated by banks.
- Bond issues can be explored for such funding needs for power infrastructure, roads, railways, port development, airports/airlines under a PPP arrangement.
- The availability of these vital infrastructures will go a long way to reducing the high cost of business operation and, ultimately, reduce banks' credit risk exposure.
- The banks should adjust to the reality of Vision 20:2020 by pushing for real sector financing as this has more ability to guarantee their continuous survival than putting their resources in bubble assets.

- Government should further devise a better way of administering subsidies to the agriculture and manufacturing sectors.
- The Executive and the legislative arms of government should curtail fiscal expansion in order to really moderate the high lending rate in the economy.
- Governments at all levels should continue to improve the enabling environment for competitive industrialization, rapid infrastructural development, good regulatory regimes, and other development indicators.

Banking Sector Reforms and the Industrial Sector: The Bank of Industry Experience

*Evelyn N. Oputu (Ms)**

I. Introduction

Banking industry has witnessed a number of reforms at different times in response to financial crisis or as a catalyst for economic development. In Nigeria, these reforms dated back to the colonial era. Major reforms are presented below. The Banking Ordinance of 1952 was triggered by the mass failure of about 24 banks in the pre-independence era. The situation led to the introduction of the first legislation to regulate banking operations in Nigeria; the Indigenization Act of 1977 encouraged private Nigerian entrepreneurs to enter into joint ventures with foreign banks to establish banks. The downside of the indigenization policy, however, was its unintended consequence of making the Federal Government the largest single shareholder in leading banks; and the deregulation policy of 1986, among others, liberalized the issuance of banking license, leading to a proliferation of undercapitalized banks with poor risk management and poor corporate governance practices. The Banking sector reform was a response to weak capitalization which culminated into the banks' minimum capital requirement being increased to ₦500 million. Twenty-six banks were liquidated on account of distress.

By January 2001, the banking sector was fully deregulated with the introduction of the era of one-stop-shop and the adoption of universal banking system. Thus, the inevitable need for greater capital led to the increase in banks' minimum capitalization to ₦2 billion.

A fragmented "rent-seeking" banking industry "earning income by capturing economic rent through manipulation/exploitation of the economic and political environment, rather than by earning profits through economic transactions and the production of value-addition wealth" had to be addressed. Consequently, banking consolidation with a directive to banks to increase their minimum capital base from ₦2 billion to ₦25 billion within 18 months was introduced in 2004. Thus, banks were mandated to raise funds aggressively and commence the process of mergers and acquisitions, if unable to meet the stipulated minimum capital base.

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At the end of the consolidation exercise, the number of banks dropped from 89 to 25 and, eventually to 24 following a merger of two of the consolidated banks. As a result of the flaw in the implementation, inadequate supervision and the global financial crisis which occurred simultaneously at that period, the sudden increase in capital requirement led to a very fractured banking industry which tended towards systemic failure, hence, the need for further reforms. Following this brief introduction is section two which analyzes the reforms and the real sector while section three highlights the mandate and functions of the Bank of Industry. The concluding remark is covered in section four.

II. Reforms and The Real Sector

Given the critical nature of the real sector to the growth of the Nigerian economy, the CBN had in the past used policy measures to compel banks to devote attention to the real sector especially Small and Medium Enterprises (SMEs).

II.1 Past Reforms

- The sectoral credit allocation and interest rate cap of the 1970s and early 1980s
- The CBN introduction of SME I and II financing schemes
- The Small and Medium Industry Enterprises Equity Investment Scheme (SMIEEIS) and the Rediscounting and Refinancing Facility initiated in 2002.

Despite the above measures which were meant to galvanize banks to lend to the real sector, including the bank consolidation exercise of 2005 that raised hopes that high level of liquidity in banks would engender lending to the real sector, banks' lending to manufacturers remained diminutive.

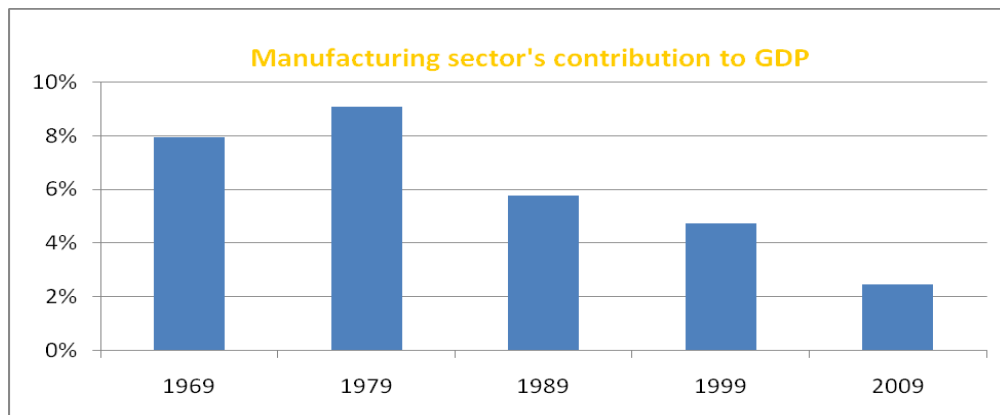
A careful review of the effects of the banking sector consolidation reforms on the real sector and macro-economy revealed the following unintended but related consequences:

- Distortions in the macro-economy caused by large and sudden capital inflows.
- Worsening conditions in the business environment, in particular the real sector, occasioned by :

- Crowding-out of the real sector in financial allocation as capital was deployed to purchase bank shares.
- The lure of the stock market, leading to the allocation of significant part of the capital sucked in by banks during consolidation to margin loans and proprietary equity trading.

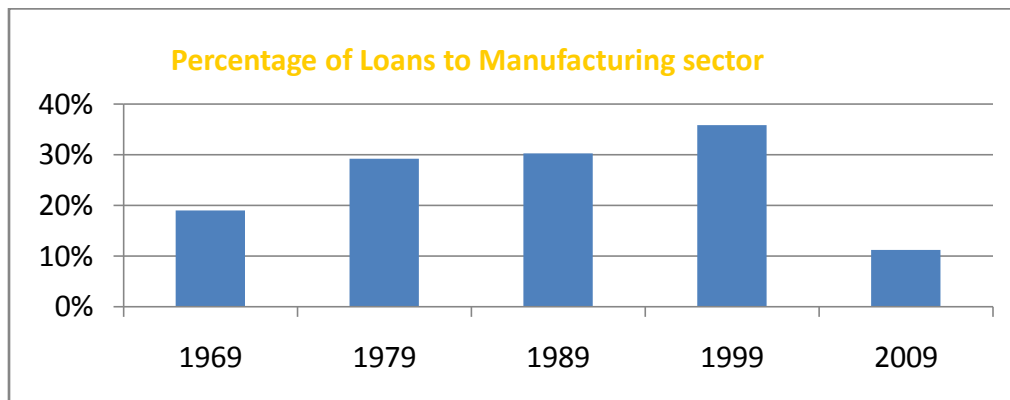
Thus, while the stock market “bubbled”, the real sector witnessed significant downturn in activity. Manufacturing output was particularly hard hit, estimated to have fallen to its lowest levels since 1969 in terms of contribution to GDP as well as share of credit allocation to the sector as depicted in the charts below:

Figure 1: Manufacturing Sector’s Contribution to GDP



Source: Central Bank of Nigeria Statistical Bulletin, December 2009

Figure 2: Percentage of Loans to Manufacturing Sector



Source: Central Bank of Nigeria Statistical Bulletin, December 2009

II.2 Current Banking Reforms

From the foregoing, there was need for urgent measures to be taken to contain the crisis and this informed the actions taken in the current banking reforms. The objective of the current banking reform is broadly two-fold:

- stabilize and enhance the quality of the banking sector; and
- promote long-term sustainable growth of the banking sector and the economy as a whole.

Both elements as indicated have significant impact on the overall growth of the manufacturing sector and the reasons are that:

- i. financial sector soundness facilitates macroeconomic stabilization and creates the conditions for the resumption of growth.
- ii. the tendency towards a systemic banking crisis prior to the reforms made major government intervention imperative. Intervention is justified by negative externalities associated with widespread bank failures, such as disruptions to credit flows and reduction in the granting of loans.
- iii. Progress in banking reforms was critical for improving domestic and foreign confidence in the economy.

Given that lack of credit is just one of the many setbacks facing the manufacturing sector, critics of the banking reforms argue that weak domestic demand, the high cost of doing business in Nigeria arising from the poor state of infrastructure require intervention beyond establishing a sound financial system and that the reforms short-circuited lines of credit to Nigerian banks with adverse consequences for the economy.

A major question was whether the economic program should focus exclusively on macroeconomic policies, leaving the banking reforms for a later time, or should the banking reforms have been made at a slower pace? The following holds true and is consistent with lessons learnt and good practices from international experience:

- i. The large amount of non-performing loans in the system had resulted in an excessively cautious lending environment. The delay in the banking reforms would have caused even greater credit hold back and further postponed the restoration of normal credit flows.

- ii. Allowing insolvent banks to continue operating without restructuring the sector would have promoted market distortions.
- iii. The banking reform was important in facilitating the rollover of maturing foreign lines of credit and new private investment crucial to ensuring the necessary financing of the economy; flows may have stopped if domestic banks and businesses were perceived to remain financially shaky and inadequately supervised.
- iv. Keeping insolvent banks in business for much longer would have cost the system much higher than the ₦620 billion liquidity injection by the CBN and further complicated monetary management.

II.3 CBN Intervention Fund

- The ₦500 billion intervention is part of monetary policy management to ensure adequate monetary growth and provide sufficient long-tenured liquidity in the banking system to boost real sector activity.
- Managed by the Bank of Industry, the ₦200 billion out of the ₦500 billion intervention fund is for the refinancing/restructuring of bank loans to the manufacturing sector while the balance of ₦300 billion is for power and aviation sectors and the loan attracts an interest rate of 7.0 per cent and tenor of up to 15 years.
- Applications were received from 681 companies for the refinancing component for a total of ₦250 billion, with 516 found to be eligible for about ₦200 billion.

Preliminary analysis indicates that the impact of the fund both on the real sector, the banking sector and the economy as a whole has been tremendous. This includes:

- Improved cash-flow through lowered beneficiaries' interest cost, lengthened beneficiaries' debt maturities and reduced overall debt service.
- Improved banks' loan books and reduction in loan loss expense.
- Improved liquidity in the system.
- Provided working capital to enhance SMEs / Manufacturers' operations.

- Increased employment generation

- Resuscitation of ailing industries

The intervention in the power sector now in progress is likely to have more impact in reducing the cost of doing business for manufacturers and boosting economic activity.

Specific interventions like the ₦500 billion Fund portend a bright future for the Nigerian manufacturing sector.

III. Bank of Industry (BOI)

The Bank of Industry is Nigeria's leading development finance institution (DFI) which has contributed significantly to Nigeria's economic and social development since emerging from the reconstruction of its precursor institution, the Nigerian Industrial Development Bank (NIDB).

III.1 Mandate of BOI and Major Activities

The mandate of the bank is primarily to finance and catalyze industrial development. In the last five years, the vision has been to finance growth and empower the weaker segments of the society to gain access to productive assets and opportunities for sustainable growth and development.

The effort towards equity and empowerment through lending and capacity building for sustainable inclusive development has engendered a paradigm shift since 2005 in the bank's strategic direction, orientation and mode of operation. Central to the bank's paradigm shift are:

- Structured industrialization of the country through the stimulation and development of micro, small and medium enterprises (MSMEs), which are widely recognised as the engine of economic growth, with higher developmental impact and multiplier effect per unit of investment;
- BOI's commitment of 95 per cent of its resources to MSMEs geared toward the attainment of the objectives of National Economic Empowerment and Development Strategy (NEEDS), New Partnership for Africa's Development (NEPAD) and the Millennium Development Goals (MDGs).

- Expanding the private sector and bringing to bear, the efficiencies and institutional capacity of the formal sectors operations on the large informal sector which could contribute significantly to GDP.

All of these culminated in the phenomenal growth in the volume of the bank's investments as shown in the table below:

Table 3: Value of Investment/Loans - 2005-2010

	Sept 2010	2006- 2009	2001- 2005	Per cent Growth (2005- 2009)	Per cent Growth (2005- 2010)
No of Investments	249	643	88		
Commitment in the No of Investments	980	731	88	731 per cent	1013 per cent
Value of Investments (Nbn)	44.7	56.1	9.8		
Cumulative Value of Investment (Nbn)	110.6	65.9	9.8	572 per cent	1028 per cent

Source: Bank of Industry (various issues)

Very importantly, the financial and operational performance confirms that enterprise profitability and development could be complementary. Through home grown reforms, there exists a strong, dynamic and flexible DFI responsive to the citizenry.

III.2 Emerging Initiatives in the SME Sub-Sector

Specific initiatives and self-driven developmental measures taken to ameliorate the challenges of SMEs which were discovered through our intensive and extensive work with the SMEs over the period, include:

- Cluster-based Industrial Development Strategy.** Advocated for and encouraged the adaptation of the cluster-based industrial development strategy through the establishment of industrial parks and other cluster formations – the parks/clusters are planned to be implemented using the public-private partnership (PPP) arrangement under BOI.
- Value-Chain Approach.** Deliberate measures towards the insertion of the Nigerian SMEs on the global value-chain and the encouragement of

entrepreneurial capitalism to be developed by transformational rather than transactional entrepreneurs.

- c) **Pro-Employment Strategy.** Pro-employment with emphasis on the re-establishment of the missing middle-class especially through the empowerment of the disadvantaged groups, e.g women and the youths. Through this, the bank created a Gender Desk, handling various loan schemes exclusively for women affairs amongst others.
- d) **Partnership Programme.** The synchronization of the bank's funding programmes with the developmental objectives and resources of the states/local governments – This programme led to the creation of matching funds whereby state governments provide funds which are matched with BOI funds for onward-lending to projects from the partner-states.
- e) **Financial Model.** Creation of financial models that will meet the requirements of the MSMEs, e.g:
- Cooperative cluster: designed to reach the relatively small operators without access to collateral property. As at date, the bank has approved over ₦1.360 billion under the window to more than 220 Associations; and
 - Structured working capital financing: a "derivative" product of the bank to assist companies with growth potentials but lacking adequate working capital.
- f) **Capacity Building** - Empowerment of the Nigerian entrepreneurs through exposure to international best practices and establishment of global partnership in support of the MSMEs. This entails:
- ❖ organising Boot-Camp workshop primarily to sensitise indigenous existing and potential entrepreneurs to business opportunities, financing, as well as inculcating successful management skills in local business owners.
 - ❖ Collaborating with various multilateral development agencies in the training of local entrepreneurs.

- g) Facilitating the partnership/franchising working arrangement between indigenous producers and foreign producers who are mainly Nigerians in the Diaspora.

III.3 Specialised Funds

Management of specialized funds for industrial development, including the CBN Intervention Fund, the National Automotive Development Council (NADC) Fund, the Business and Development Fund for Women (BUDFOW), the Sugar Fund, the SMEDAN Fund, the MSME Development Funds in: Anambra, Delta, Kwara, Niger, Kogi, Osun, Ondo, Edo and Ekiti States totaling about ₦3 billion as at date, the Cotton, Textile and Garment Development Scheme, and the Rice Intervention Fund .

IV Collaborative Efforts

There is an on-going collaboration between BOI, United Nations Industrial Development Organisation (UNIDO), CBN and Alliance for Green Revolution in Africa (a private agency for agricultural development and financing in Africa) among other stakeholders to develop a framework for the identification of the agricultural value-chains and provide a financing window for the agribusiness. This becomes important as agriculture accounts for 40.0 per cent of Nigeria's GDP, 70.0 per cent jobs are agriculture-related, accounts for 85.0 per cent of non-oil export, agro-industry contribution to real sector GDP is 6.0 per cent, 90.0 per cent of the poor and engaged in agriculture, and less than 5.0 per cent of those in agriculture have access to finance

- ❖ In order to facilitate regular supply of energy as well as to reduce cost of production by MSMEs in various clusters, BOI is partnering with UNDP on renewable energy initiative, using BOI as the Implementing Agency.
- ❖ BOI is also actively involved in capacity building programmes in collaboration with UNIDO, US Department of Commerce, business partners, IDC of South Africa, USA and Thailand EXIM banks, among others, for training of entrepreneurs and officers of the bank in order to expose them to international best practices.
- ❖ In order to deepen capacity of entrepreneurs and encourage export, an AGOA Resource Centre was established in BOI head office. The centre is engaged in training entrepreneurs that are willing to export their products to the US market, duty free.

Going forward, the BOI is poised to be a key part of the team that will bring fundamental strategic change in the manufacturing sector and the macroeconomy in general, resulting in higher output and employment. Effort is being directed at diversifying, modernizing and strengthening the industrial base for international competitiveness. Some specific programs are:

- Enhancing the vitality of SMEs to drive Nigeria's manufacturing into the 21st Century
- Promoting the establishment of local resource-based manufactures to enhance primary products value-added - special funds currently running for the rehabilitation and modernization of rice milling, CTG and automotive components industries
- Creating industrial diversity and building capacity to take advantage of the emerging export opportunities
- Moving industrial production up the ladder to products with higher levels of technological sophistication.

V. Concluding Remarks

Financial and corporate sector weaknesses have played major roles in the slow pace of growth of the real sector of the Nigerian economy. These weaknesses increased the exposure of financial institutions to a variety of external threats, including declines in asset values and market contagion.

Policy responses to the banking crisis have rightly emphasized structural reforms in the financial and corporate sectors in addition to the implementation of appropriate macroeconomic policies. Current banking reform is a step in the right direction and the preliminary results are positive.

Finally, there would be need to complement banking sector reforms with the development of a vibrant educational system, modern institutions, legal structures, social and physical infrastructures as well as new skills and attitudes that will contribute to higher economic growth and development.

A Statistical Survey of Productivity, Monetary and Financial Indicators in Nigeria

*Omolora O. Akanji (Mrs)**

I. Introduction

In the last 3 years, we have had prolonged spell of economic uncertainty, which coupled with the development of public and private policies are aimed at cultivating a competitive local, regional and international environment, and have significantly augmented the demand for a more valid and comprehensive set of economic indicators. In this regard, the measurement of changes in the productivity, monetary and financial indices must be viewed as critical addition to the current range of consistently available statistics on Nigeria's economy for analysts to take rational decisions about the economic fundamentals in Nigeria.

However, over the decade, productivity and economic growth measurement had preoccupied the global statistical expert communities' work. This work has included both efforts to improve the measurement of productivity and the inter-relationship of the macroeconomic statistics with the productivity and growth indicators as shown in the System of National Accounts (SNA) 1993 and the OECD productivity manual 2001, which set a more in-depth understanding of the drivers of productivity performance. In the same vein, the IMF in collaboration with the statistical country experts developed Monetary and Financial Statistics Manual (MFSM2000) and the Balance of Payments Manual (BOPM 2000). In the course of the preparation of these manuals, the understanding and the concerns were that statistics across nations must conform to the test of comparability and consistency.

Productivity, monetary and financial indicators will provide policymakers, local business establishments and international investors the means to adequately detect and eliminate inefficiencies within the production process, price level changes, monetary aggregates, investment instruments and financial stability indicators that can eventually lead to lower real costs and greater competitiveness.

Within the Nigerian Statistical Systems, the development of productivity indicators is statistically handled by the National Bureau of Statistics (NBS) while the monetary and financial indicators are within the purview of the Central Bank of

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Nigeria (CBN). The development of these indicators open up new opportunities to satisfy the need for critical information needed to achieve the national developmental goals. At the national level, the NBS is the main institution mandated by law to:

- Collaborate with departments of Government and with local authorities in the collection, compilation, analysis and publication of statistical records, and
- Organize a co-ordinated scheme of social and economic statistics relating to the Nigerian economy.

However, the intensive development of statistics covering financial institutions has always been within the process of the CBN. This is attributable to two main factors. First, monetary aggregates have been gaining increasing prominence, both in economic theory and in the framing of economic policies and determination of financial sector stability. The rate of increase in money has become an important economic indicator, for which countries often set a target and to which the public also attaches considerable interest. Second, statistics covering monetary as well as other financial institutions are increasingly being used as a basis for a system of flow-of-funds accounts, which trace the flow of financial resources through the economy. It is also used for analytics of the financial markets.

Therefore, the NBS and the Statistics Department of the CBN naturally work in collaboration on various projects such as computations on productivity indicators- Quarterly Gross Domestic Product, and other relevant production indicators. In addition, NBS in order to address the sub-sector of the SNA called "other monetary institutions" do have recourse to the CBN monetary statistics. This is defined to include all banks, except the central bank, that have liabilities in the form of deposits payable on demand and transferable by cheques or otherwise usable in making deposits. Consequently, the NBS obtains data on deposit money banks to use as a proxy to the SNA grouping of "other monetary institutions". Another set of data in demand by the NBS include numbers on the Balance of Payments to facilitate the preparation of the 'rest of the world account'.

This paper is structured into three sections. Section 1 is the introduction. Section 2 discusses the methodological and conceptual issues guiding the preparation of productivity, monetary and financial indicators. Section 3 highlights the challenges and proffers recommendations on the way forward.

II. Methodological and Conceptual Issues

II.1 Statistical Survey of Productivity Indicator

Productivity is commonly defined as the ratio of a volume measure of output to a volume measure of inputs. It measures how efficiently inputs are being used in the economy to produce output. Krugman (1992) defined productivity indicator as the ratio of output to input per worker. He explained that it is the common indicator that a country uses to determine the ability to improve its standard of living over time as it depends almost entirely on the country's ability to raise its output per worker. In order to address more analytical questions, different measures of productivity are required. In this section, we survey the methodological and conceptual issues of productivity indicator.

To understand the basic principles for measuring productivity, we must understand the overriding consideration in the measurement of the domestic product. The best method is the use of value-added of input to output per labour. This is to avoid duplication by deducting from the output of each producing unit (e.g., an enterprise) the value of the inputs of goods and services which it has received from other producing units, at home or abroad. The output of a resident enterprise which is used as input by another resident enterprise should be counted twice. The value of the output of an enterprise or other producing unit less the value of its input is referred to as value-added. The total value-added in all resident producing units is gross domestic product while the unit of input per unit of output per unit worker gives the productivity indicator.

In calculating the value-added for the country as a whole, the production accounts of all resident producing units are consolidated. In the process, all output produced locally that is used at a later stage of production within the country, say, raw materials and intermediary products, cancel against the deductions made for input in the production units using it for further production. Thus, only imports of goods and services are deducted from the final output of the economy (see Appendix 1 for the methodology of computing value-added).

The NBS computes labour productivity by using value-added approach. This is greatly influenced by the availability of establishment survey and the relative simplicity of the calculations involved. For instance, for total economy, labour productivity in local currency is easily measured by dividing the gross domestic product at constant 1990 prices by the total number of persons employed in the economy. For manufacturing, the calculation is done using the total manufacturing value-added and the total number of persons employed in manufacturing. However, the OECD Productivity Manual points out that this

particular type of productivity measurement “only partially reflects the productivity of labour in terms of the personal capacities of workers or the intensity of their effort” and is influenced by the degree of capitalisation and the dynamics of other technological and organizational factors. In addition, since this indicator of productivity is measured residually, additional factors, including the conceptual and practical difficulties associated with the measurement of value-added, would have influenced any observed changes in productivity.

Establishment Survey conducted by NBS presents a proxy for unit labour cost which is defined by the quotient obtained by dividing total labour cost by the gross domestic product. It is pertinent to note that in the establishment survey the United Nations International Standard Industrial Classification (ISIC) is used to classify the industrial activities observed by all the surveys relevant to the computation of the productivity indicators. All local economic activities are defined, without deviation, by applying the codes of the ISIC. Therefore, there is little need for reconciliation of differences in the use of the industrial classification by the NBS.

II.1.1 Analytical Reasons for Computing Productivity Indicator

Productivity indicator being derived from the National Account compilation is used to measure standard of living and many other economic growth measures as follows:

- Productivity indicator is used in the analysis of labour and product market
- Productivity growth indicator is a key source of economic growth and competitiveness and as such form a basic statistics for many international comparisons and country assessments.
- Productivity change constitutes an important element in modelling the productive capacity of any economy. This permits computation of capacity utilisation measures so as to gauge the position of the economy in the business cycle and to forecast economic growth.
- Productivity indicator measures the degree to which an economy's capacity is used and this informs analysts about the pressure from economic demand and, thereby, the risk of inflationary development.

II.2 Statistical Survey of Monetary Indicators

Monetary aggregates have become important as intermediate target for macroeconomic policy in many countries in recent years. Although some

countries have moved away from specific monetary targeting, monetary aggregates still constitute important indicators and instrument of policy. This section examines the monetary concepts and definitions in an effort to establish the necessary indicators.

There are two main strands of monetary statistics that emphasize the concept of money in macroeconomic policy. One is based on the use of analytical models (money market models) to measure the relationship between quantity of money and nominal income or gross national product (GNP). This concept tends to emphasize the importance of controlling money supply in the interest of maintaining price stability. Consequently, the statistics emphasized here is the targeting of the growth rate of money stock. The second concept is the extension of the monetary approach to the analysis of balance of payments problems, and this concept is referred to as the "monetary approach to the balance of payments". This concept underlies the IMF's financial programming framework.

These two concepts drive the computation of the monetary indicators. Money is defined in terms of the banking sector, and it is linked by the balance-sheet identity to the asset base of the banking system, explained in large measure by the balance of payments and domestic credit (the latter with particular emphasis on government operations in relation to the banking system).

The characteristics of money based on transactional motives is computed as narrow money (M1) - encompasses currency plus chequeable demand deposit at commercial banks; while the broad money (M2) – encompasses currency plus chequeable demand deposit, time deposit at commercial banks, and savings and loan association. The narrow money is used in the analytical work and it throws light on the scope and impact of monetary policy. Broader monetary aggregates encompass a wider use of financial instruments than M1. The broad money indicator encompasses various subsets of liabilities of banking and nonbank financial institutions. The construction of broader aggregates is supportive of money and liquidity measures.

The monetary indicators or monetary aggregates include a wide variety of instrument such as currency; demand deposits (both chequeable and non-chequeable); call deposits; time, savings, and fixed deposits; foreign-currency deposits; repurchase agreements; bills; certificates of deposit; bonds; other commercial papers, restricted deposits; and savings deposit schemes. In Nigeria, most of these instruments are not available and so only the bonds, other commercial papers, restricted deposits and the contractual savings are included

in the broader money measure. Before 2000, the foreign-currency deposits were not often identified and included in the money measures. Now, the foreign-currency deposits of the demand, time and savings types are included in money measures.

In the discussion of monetary indicator, the issuance of the monetary instruments must be identified. In Nigeria, there are four monetary institutions that issue monetary instruments and these are – the CBN, commercial banks, the treasury or the government (through debt management office), other financial institutions.

The consolidation of the central bank and the deposit money bank brings out the monetary aggregates which are the indicators of monetary measurement. The money measure M1- generally designated as narrow money- is based on the narrowest level of consolidation, usually comprising currency and demand deposits held with the banking system primarily by the private, public enterprise, and general government sectors. The measure M2- the broadest level of money includes instruments included in M1, as well as time, savings, fixed, and foreign-currency deposits held with the banking system by the private, public, and non-bank financial institutions sectors. (see Appendix 2 for the methodology of computing monetary aggregates).

II.2.1 Analytical Reasons for Computing Monetary Aggregates

Among macroeconomic accounts, monetary statistics have two special merits: they become available with a very short delay, and they are the most reliable of all macroeconomic statistics. They are based on the balance sheets and are usually published in that form, but they are often analysed in terms of changes in assets and liabilities from one period to the next, or in terms of flows. They are applied to measure the following monetary developments:

- Narrow money (M1) measures the demand for money and helps in the forecast of demand for money
- Broad money (M2) measures the demand for money and the liquidity in the system.
- Currency in circulation measures the level of liability of the central bank in terms of the money issuance

- Demand deposit measures the liability of the central bank in terms of the commercial banks deposits with the central bank as banker to the banks
- Reserve money is the currency in circulation and DMBs demand deposits with the central bank and measure central bank's liability to the economy
- Net credit to the government measures the fiscal operations of the government in relation to the banking system
- Net foreign assets/foreign liabilities are used to define a balance of payments objective in financial programming. Changes are viewed as the outcome of the change in broad money (sources) and domestic credit expansion (uses), with due allowance for movements in the other items, including the residual.
- Domestic credit expansion is the main monetary policy instrument used to reconcile the monetary targets with the balance of payments objective.

II.3 Statistical Survey of the Financial Indicators

Financial institutions are defined in both the SNA and the MFSM as "incorporated and unincorporated enterprises, which are primarily engaged in financial transactions in the market consisting of both incurring liabilities and acquiring financial assets." There is, therefore, the need to distinguish financial activities recorded in the financial sector from related services provided by institutions that do not, or do not on a major scale, incur liabilities and acquire financial assets. Some of these services may have a close relation to the activities of deposit money banks, whereas others relate more closely to those of other financial institutions or those of both of these sub-sectors of the financial sector. These services include those provided by securities brokers, dealers, and finance houses, mortgage houses that are included in the financial sector only if they incur liabilities and acquire financial assets on their own account. If their activities do not meet this criterion, they would be attributed to non-financial sectors.

With this definition, the financial indicators are established to measure the financial market developments. As mentioned, most of the financial indicators are derived from the monetary developments in both the deposit money banks and the central bank. The indicators also run through both the domestic and foreign market operations.

In collecting statistics from financial institutions, it is highly important that financial assets and liabilities be classified by the sector of the debtor and creditor. This

classification helps one to obtain information on the financial transaction of the non-financial sectors as well as check the consistency of the statistical reports of the financial institutions.

The financial indicators are basically driven by the type of the financial instruments and calculate the “moneyness” of the instrument through the use of interest rates or the yield on the instruments. Non-monetary intermediate targets used in monetary policy include credit, prices, exchange rates and interest rates. The paths of many of these indicators (variables) may be influenced by the stance of monetary policy. This fact brings up the issue of the independence of these targets compared with monetary targets. The choice between money and credit targets is largely an empirical issue, depending on factors such as the exchange rate regime, the openness of the economy, and the ability of the authorities to monitor and control all potential sources of credit to the economy (it is possible for domestic prices to be affected not only by exchange rate adjustments but also by changes in reserve money).

Financial market indicators are high frequency statistics as they are available on real time, hourly, daily, and monthly basis and as at when the analyst demands. Financial market indicators are useful when trending is applied to the statistics from the market. The indicators are derived from the central bank balance sheet and government position; domestic operations, market prices and volumes (domestic and foreign exchange markets) (see Appendix 3 for the methodology of compiling financial sector indicator).

II.3.1 Analytical Reasons for Computing Financial Indicators

The changing financial environment has caused a shift in the demand for money and the rapid pace of financial innovations in many countries have contributed to the increased adaptation of instruments and institutions in financial markets. These developments have contributed to the perception that monetary policy effects are now channeled more through interest rate and exchange rate adjustments than through the quantity of credit or money, leading to a search for new targets for monetary policy, including the use of broader monetary aggregates and non-monetary targets such as credit targets, interest rates, and exchange rates. Consequently, the financial indicators are used to measure the financial market performance as it relates to:

- High nominal interest rates as it relates to holding cash and non-interest bearing deposits whose yields are limited by law;

- Exchange rate differential as it relates to investment in foreign or local instruments;
- Exchange rate risk in the international trade;
- Credit risk in both the domestic and international transactions;
- Government bonds and the interest rate risks;
- The performance of the public debt instruments in terms of volume and value;
- Trends in the trade (foreign exchange market, stock market, futures market; commodity market, etc) to help obtain trend line analysis; and
- To determine “psychological” price levels to support or resist the market.

III. Challenges of Computing Indicators and the Way Forward.

The System of National Accounts (SNA) 1993 was structured to contain consistent and integrated set of macroeconomic accounts that covers all sectors and sub-sectors of the economy and the economic relationships of an economy with the rest of the world. This comprehensive accounting framework forms the bedrock of the indicators so described above. It facilitates a whole range of analysis covering production (productivity), income distribution, financial sector and monetary aggregates. Because of the integral links between the 1993 SNA productivity and income accounts and the monetary and financial statistics with respect to principles and concepts, the challenges of their computation are very generic.

However, individual sector compilation has its own challenges which are discussed in this section along the three dimensions of the indicators described above- (i) Productivity, (ii) Monetary and (iii) Financial.

III.1 Productivity Indicator Challenges.

- (1) **Data Challenges:** the choice of data is a challenge in the computation of productivity indicators. Productivity measures rely heavily on the integration of measures of output and input, creating problems of data choices and linkages. For example, the combination of employment, hours worked and GDP. This is evidenced in the computation of labour productivity growth in the business sector. Business sector output is defined as economy-wide GDP less government wage bill, less net direct taxes

and government consumption of fixed capital. The use of a table of discrete output and input combinations do facilitate the efforts of the compilers.

- (2) **Data Inconsistency:** Productivity is poorly measured in the public sector where accountability of the timing of work done is not taken serious; consequently, it is a sector not included in the measurement. Befy, *et al* (2006) advocated for total economy basis as an ideal method of measuring productivity.
- (3) **Constraint of Data Availability:** The NBS use of establishment survey has a lot of constraints of data availability. This is because of poor record-keeping and inconsistency of accounting methods in the establishments. Also, non-availability of an appropriate series of data on employment, labour costs payments and other missing data values constitute enormous challenges to the computation of productivity indicator.
- (4) **Developmental and other Challenges:** Computing productivity indicators is not an institutionalized activity within the National Bureau of Statistics. Although data from the database for establishment survey are used, however, the productivity tables are not produced on a regular basis. There is the need for the NBS to have consistent presentation of productivity statistics.

III.2 Monetary Indicator Challenges.

It has been mentioned that the most reliable of all macroeconomic statistics is the monetary statistics which are readily available. They are based on balance sheet but analysed in terms of the changes in assets and liabilities from one period to the next, or in terms of flows. The challenges come in the efforts at getting the transactional report into the assets and liabilities **classification**, and to get the monetary aggregates reflect the actual development in the market. Most of the challenges are in the area of **aggregation, consolidation and netting**.

The challenge of **aggregation of data** across the institutional units within a sector or sub-sector is very pronounced, more so where the aggregation is done semi-manually. The challenge of **consolidation** has been a source of concern. Consolidation refers to the elimination of stocks and flows that occur between institutional units. In consolidation, compilers do get confused about the stock and flow concept. And so you get a situation of double-counting where an institutional unit consisting of a headquarter and branch offices should have

reported stock and flow data consolidated across all offices of the institutional unit, but rather submit stock and flow data for all the branches except the headquarter. Again, sectoral consolidation also poses challenges. For sectors and sub-sectors, flows between constituent units should not be consolidated. This should be based on aggregation rather than consolidation. However, for analytical purposes, the data in the sectoral balance sheets are consolidated to obtain the surveys of the financial corporation sub-sectors.

The challenge of **netting** has been a long standing issue even as we discuss. The general principle as it relates to the 1993 SNA is that data should be collected and compiled on a gross basis. For example, deposit transactions in a particular category should be defined as the amount of new deposits less withdrawals during the period. In exceptional circumstances, it may be necessary to compile and present data on a net basis, simply because the data are not available on a gross basis.

III.3 Financial Sector Indicator Challenges

The financial sector indicator encompasses both monetary indicators and financial stocks and flows among all sectors of the economy and between these sectors and the rest of the world. Consequently, the challenges encountered in the compilation are similar but not the same with the monetary sector indicator compilation. The challenges of compiling financial indicators are as follows:

- The challenge of **pricing of financial assets**;
- The challenge of **calculating the accrued interest for traded securities**;
- The challenge of **time of recording transactions and valuation**; and
- The challenge of **exchange rate and interest rate risks**.

III.4 The Way Forward in Addressing these Challenges.

This paper discussed the definition and concepts that drive the statistical survey of productivity, monetary and financial indicators. The paper observed the relationships between the productivity and monetary and financial indicators by presenting the methodological approach to the compilation of monetary accounts and the balance sheet approach of the SNA 1993. The challenges are also very similar in the sense that they are driven by the need for consistent and clean data. Also, availability of survey data that conform to the underlying transaction and the concept of analytical compilation are of paramount need

within the context of the three indicators discussed. Most crucial is the need to have daily market data for financial indicators, market intelligence report and industry trend data.

We must strengthen the collaboration effort of the CBN with the NBS to ensure that we have more robust sets of analytical statistics. We must continuously gather and clean up data, provide up-to-date insight on market behavior through comprehensive compilation of market data, product/productivity and services data.

The NBS must start to consolidate the processing of productivity data, improve the methods and sources to enhance the quality of the productivity calculation. We are aware that the National Accounts questionnaires have already been modified to supply data on hours worked, payments to labour and the number of persons employed by industry and establishment. This will in future facilitate efficient and effective productivity calculations. National account tables will offer all the input data required to produce productivity indicators. This will limit the extent to which final productivity figures are affected by the difference in reference periods, data coverage and other conceptual definitions employed by varying data sources.

Dissemination of the indicators is very necessary by the relevant institutions that generate the data. Productivity data dissemination should essentially be targeted at the manufacturers' Association, the Income and Productivity Council, the Economic Council, the Chamber of Commerce, the Research and Policy Units of the Ministry of Finance and the Central Bank of Nigeria.

There is need to follow up on the activities of the NBS in the area of their collaboration with the CBN and other agencies/institutions. This will ensure that the series of indicators are released as and when due. Finally, there must be continuous training and retraining of the compilers of these indicators. The institutions must adopt the seamless succession program that makes for ease of exit of the matured compilers for the younger compilers to take over the schedule.

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- www.oecd.org/statistical/productivity

Appendix 1

Computing Value-Added for the Measurement of Productivity

In the establishment survey, the productivity indicator is computed using value-added of input to output of labour.

Sources and Methods: value-added for each economic sector in the establishment survey (Table 1) is calculated by using one of the following methods, (a) the production, (b) income, and (c) expenditure and commodity flow approach; summing the value-added for all economic sectors that are classified for international comparison by ISIC (International Standard for Industrial Classification) and deducting an imputation made for banking service charge, results in the aggregate, Gross Domestic Product at factor cost.

Gross Domestic Product that is derived is used as a benchmark data to calculate market prices GDP, Gross National Product (GNP) and Gross Savings.

Production Approach: The production approach consists of deducting intermediate inputs from gross value of output to derive the value-added. This approach is compiled mainly for industries producing commodities e.g agriculture, mining and quarrying, manufacturing, etc.

Income Approach: The income approach consists of amassing estimates of compensation of employees and operating surplus. This approach is mainly used to estimate value-added for the services sectors.

Expenditure Approach: The expenditure approach is used to generate market prices GDP, it also satisfies the criteria for the accounting identity $GDP = C+G+I+X-M$ for key aggregates of balance of payments flows and accounts of the total economy.

C	=	private final consumption expenditure
G	=	government final consumption expenditure
I	=	gross domestic investments
X	=	exports of goods and services
M	=	imports of goods and services
GDP	=	gross domestic product (market prices)

Gross Domestic Product at market prices is derived by adding to factor cost GDP, indirect taxes and deducting subsidies. Net exports of goods and services identified in the accounting identity as X-M ($GDP = C + G + I + X - M$) is obtained from the Balance of Payment statistics

Gross Capital Formation (I) is sourced from the CIF values of capital goods imported.

Government consumption expenditure calculated as the sum of compensation of employees (salaries, wages, social security, etc.) plus intermediate expenses less non-industrial sales of government identified in the accounting identify as (G) and the residual private consumption expenditure (C) is derived as the difference between GDP market prices ($G + I + X - M = C$)

Table 1: Economic Sectors in the Establishment Survey

ITEM	ISIC	CLASSIFICATION APPROACH
1	Agriculture	Production Method
2	Mining and Quarrying	Production Method
3	Manufacturing	Production Method
4	Construction	Commodity Flow
5	Electricity and Water	Production Method
6	Wholesale and Retail Trade	Commodity Flow
7	Hotel and Restaurants	Production Method
8	Transport	Production Method
9	Communication	Production Method
10	Financial Intermediation	Production Method
11	Banking	Production Method
12	Insurance	Production Method
13	Real estate and Owner Occupied Dwellings	Commodity Flow
14	Producers of Government	Income Approach
15	Services and Other Services	Production Method

Appendix 2

Computation of the Monetary Aggregates

Monetary aggregates are the monetary indicators that facilitate the analysis of the monetary conditions of the economy and the effect of monetary policy.

The framework involves consolidation at three levels. The first level is the consolidation of the asset and liabilities of the monetary authorities. Second, the assets and liabilities of deposit money banks must be consolidated (for comparability, the stock and flow data reported by individual units are aggregated into sectoral balance sheets). The third level is the account of the monetary system as a whole, consolidated by combining the accounts of the monetary authorities with those of the deposit money banks by eliminating intra-system entries.

The items in the consolidated balance sheets of the monetary system are classified in certain standardized categories. The main distinctions are between assets and liabilities and, within each of these, between those that are domestic and those that are foreign. Foreign assets cover gold, SDRs, foreign exchange balances and the claims on the government and holdings of Treasury Bills. The only important category within the domestic assets is usually domestic credit. On the liabilities side, is the money and quasi-money. Money consists of currency and coin (liability of the monetary authority), and demand deposits, in most cases overwhelmingly the liability of deposit money banks. Quasi-money consists mainly of savings and time deposits, together with deposits denominated in foreign exchange, held by residents with domestic deposit money banks and the central bank. Both exclude the holdings of the central government. Deposits held by the central government with the monetary system are netted against credit extended to the central government in the monetary survey. In the consolidated balance sheets of the sub-sectors of the monetary system as published in the IFS, credit to the central government are shown on a gross basis.

Other items in the consolidated balance sheet of the monetary system are usually shown on a net basis (almost invariably a liability). The behavioral equation of the monetary aggregates which is structured to facilitate macroeconomic analysis is shown below:

$$BM \text{ (liabilities)} = NFA + DC - OIN.$$

Where: BM is Base Money (liabilities)

NFA is Net Foreign Asset

DC is Domestic Credit, composed of the net claims on central government and claims on the private sector

OIN is Other Items Net, made up of a residual category of other liabilities less other assets, when other liabilities include all liabilities not included in the broad money

This framework is analyzed into total flows which are closing stocks less opening stocks for the Depository Corporation sector as follows:

$$\Delta BM = \Delta NFA + \Delta DC - \Delta OIN$$

where Δ denotes a total flow (period-to-period change)

The flow data in each category in the Deposit Corporation Sector are decomposed into separate flows for transactions and valuation changes. For example, changes in broad money liabilities can arise from changes in the foreign assets and foreign liabilities of the deposit corporations as can be seen from the behavioral identity ΔBM to ΔNFA ; also ΔDC is decomposed into $\Delta NCG + \Delta NPS$

The text below is an example and an observation of the effect of conceptual and definitional understanding of the computation of monetary indicators. This was an issue when the country was under the Policy Support Instrument (PSI) of the IMF during 2005 to 2007

An Observation on the Computation of the Base Money for End-December 2006.

1. The computation of the Base money target for end-December 2006 which resulted in ₦776.9 billion did not take cognizance of the accounting framework consistent with analytical balance sheet identity.
2. The accounting framework implies that assets must equal liability components of the balance sheet. The balance sheet identity is presented below as:

$$\begin{array}{rcccc}
 \text{BM} & = & \text{NFA} & + & \text{NCG} & + & \text{CDMB} & + & \text{CPS} & + & \text{OIN} \\
 \Downarrow & & \Downarrow & & \Downarrow & & \Downarrow & & & & \\
 \text{Liability side} & = & & & & & & & \text{Assets side} & &
 \end{array}$$

The base money is part of a balance sheet identity; and as such, changes in the base money components which is on the liability side has to be compensated with changes in the components on the asset side of the balance sheet in order to preserve the accounting consistency.

3. However, the computation done to arrive at the end –December 2006 base money did not consider the implication of the changes of Deposit Money Banks’ balances based on the balance sheet identity and accounting framework. This was due to the fact that all the changes in banks’ deposit with Central Bank was netted out on the liability side which resulted in negative banks’ balances with the CBN.
4. The changes should have been treated holistically in the context of the balance sheet identity as shown below.

Table 2: Summarised Analytical Balance Sheet of the Central Bank

Assets	Liabilities
1. Net Foreign Assets (NFA) (RM)	4. Reserve Money
2. Net Domestic Assets (NDA) (CIC)	4.1 Currency in Circulation
2.1 Domestic credit (Net) (NDC) (DDMBs)	4.2 DMBs Deposits
2.1.1 Claims on the Central government (net) (NCG) Reserves	4.2.1 Required Reserves
2.1.2 Claims on the DMBs (CDMBs) Reserves	4.2.2 Other Reserves
2.1.3 Claims on other Private Sectors (CPS)	
2.2. Other items (net) (OIN)	



5. In view of the above, it is expected that those deposit money banks that exhibited negative closing balances (overdrawn position) and have received temporary lending facility (under the new monetary policy framework) from the CBN should be reflected on the assets side of the CBN analytical balance sheet as *claims on Deposit money banks*.
6. Also banks with positive closing balances should be considered as a component of the base money because they own reserves and their balances should be treated as *other reserves* under the base money on the liability side of the balance sheet.
7. Using the information obtained by the Monetary Policy Department (MPD) on banks' opening balances and the daily analytical balance sheet, the base money and other components of the balance were computed.
8. The figures for the Base Money in the analytical balance sheet was replaced with the banks' balances, computed required reserves less domiciliary deposits and currency in circulation figures obtained by MPD on daily basis.
9. Banks with positive daily balances were summed up under the "other reserves" component of the Base Money, while those with negative balances were summed up under claims on DMBs by the Central Bank.
10. A second scenario was computed using a maximum of five million naira as opening balances for banks with positive balances and whose opening balances had exceeded five million.
11. Going by international best practice, accounting consistency and balance sheet identity should be preserved in the treatment of sectoral balances.

Appendix 3

Computation of the Financial Sector Indicators

The financial sector indicators are derived from the monetary indicators and are based on financial assets and liabilities. The financial assets and liabilities are classified by creditor/debtor sectors. The three sub-sectors are consolidated to obtain the financial sector survey of which the indicators are derived.

The balance sheets and accumulation accounts are the recommended framework for financial statistics because they provide an internationally-recognized set of guidelines for integrating financial stocks and flows into a complete system of accounts. Some of the financial sector indicators are listed below and they are usually transactional and balancing items:

- Net lending(+)/net borrowing (-)
- Net acquisition of financial assets/Net incurrence of liabilities made up of (currency, transferable deposits, other deposits, securities other than shares, loans, shares and equity, insurance and other equity, financial derivatives and other accounts receivable)
- Currency and deposit

Financial Sector Liberalization and Challenges of Real Sector Financing in Nigeria: The World Bank Perspective

*Ismail Radwan**

Deepening Nigeria's financial markets is a key component of economic diversification and job creation. An efficient and functioning market for credit will stimulate business activity and support Nigeria's dynamic entrepreneurs. There is a prevalent feeling that following the banking sector crisis which erupted in August 2009, this process has stalled as commercial banks have curtailed their lending to the private sector causing a credit crunch or squeeze.

Our analysis indicates that such a credit crunch has not taken place. Instead banks have moved to clean up their loan portfolios, writing off bad loans that fueled speculation in the stock market and the energy sector. Under increased scrutiny from the CBN, commercial banks have tightened credit procedures and improved reporting standards to reduce irregular practices such as related-party and insider-lending. This process has been accompanied by a flight to quality as banks switched from speculative assets to secure government papers and also placed increasing liquidity in the interbank market – now guaranteed by the CBN. As interest rates on government debt fell – yields on one year treasury bills plummeted to 4 per cent - the pressure on the banks to seek more lucrative earning assets has increased. Many banks are starting to focus on the emerging SME loan market, where interest rates are a good deal higher. But most are reluctant to enter a traditionally risky and difficult market. **If government can improve the SME lending environment, activity in the sector will grow quickly.**

The key threat to increased SME lending is the burgeoning fiscal deficit. Government spending has climbed inexorably since 2006, while revenues have been volatile. The excess crude account has been depleted and government has borrowed increasing amounts (largely financed from domestic sources) to finance the shortfall. If these trends are not reversed the private sector will continue to be crowded out, interest rates will rise and banks will continue to be tempted to focus on buying government paper rather than starting to expand lending to the real sector.

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In addition to ensuring fiscal discipline **government can take steps to improve real sector in Nigeria;**

- Improving creditor rights, credit information, collateral registries and fast-tracking the completion of a national identity management system and introducing commercial courts.
- Building regulatory capacity so that the ongoing reform of the financial sector is effective in managing risk rather than just a symbolic exercise.
- Building capacity in the private sector through business development services, managerial training and financial literacy programs.
- Building capacity in the banking sector through downscaling programs to introduce new techniques and products e.g. reverse factoring, warehouse receipts and equipment leasing.
- Quickly resolving the uncertainties surrounding the rescued banks and AMCON.
- Developing long-term options for housing finance and infrastructure finance.

In doing so government must avoid the mistakes of the past; ending costly and poorly targeted interest rate subsidies, avoiding directed credit and above all ensuring sound supervision and regulation of the banking sector.

I. Introduction: Real Sector Financing a Key Component of Job Creation

Nigeria has made tremendous progress in economic development over the last ten years. Successive governments have achieved macroeconomic stability, tamed inflation, secured a stable exchange rate and established fiscal prudence. These achievements, along with the write-off of Nigeria's external debt, have produced a period of long and steady economic growth. However, this growth has not been met with a corresponding increase in the number of jobs especially for Nigeria's youth.

It is widely accepted that the private sector is the engine of growth. The creation of an enabling environment will make it achievable. Three major challenges have been identified as constraints to doing business in Nigeria; the lack of power, poor roads and lack of access to finance as well as the cost of finance.

Providing finance to Nigeria's real sector especially the small and medium enterprises (SMEs) will be a key component of future job creation. Nigeria's banks have never successfully lent to the nation's SMEs. This paper reviews banks efforts in providing financing to the real sector with a view to creating more jobs. It provides recommendations on pro-active policy measures that the public sector authorities can undertake to address the issue.

II. The "Credit Crunch": Real or Imagined?

There is a widespread view in Nigeria that the recent banking sector crisis has been followed by a credit crunch and that this has restricted access to finance in the real sector. This section reviews the evidence starting from the banking sector reforms that took place between 2004 and 2006.

Explosive credit growth 2006-2008

As a result of the consolidation of the banking system completed in 2005, Nigeria witnessed increased growth in the banking sector. Banks expanded very rapidly, raising large amounts of new capital and attracting large volumes of new deposits. These were in turn deployed to fund enormous growth in the banks' loan portfolios. By 2008, analysts of the Nigerian financial sector were becoming increasingly concerned by the pace of credit growth given the weak governance of Nigerian banks, outdated legal and regulatory frameworks, and weakness of supervisory institutions.

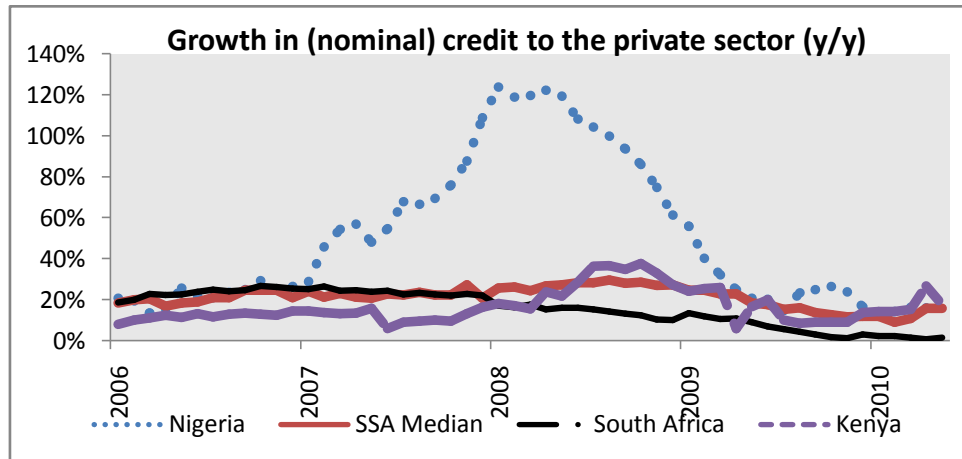
During this review period, it was now recognize that much of the lending which was then taking place was either:

- (a) margin loans; financing speculation in the stock market (often in the form of investments in bank shares);
- (b) concentrated in the oil and gas sector without adequate credit assessments or collateral;
- (c) fraudulent behavior such as related-party lending, insider-trading and inaccurate reporting.

None of this lending was actually being channeled to productive uses in the real sector or value-adding businesses; and it became apparent that a credit and stock market bubble had formed by early 2008. In January 2008, the World Bank undertook an analysis that indicated that the Nigerian stock market had the

second highest price-earnings ratio of any stock market in the world. The report also underscored the weaknesses in the banks portfolios exacerbated by poor supervisory practices and weak accounting systems. During the review period, the global financial crisis, the stock market meltdown and the collapse in oil prices resulted in huge default rates in Nigeria's banks.

Figure 1: A Credit Bubble Develops 2006 – 2009



Source: Central Bank of Nigeria 2010.

The CBN reins in the banking sector's excesses

As a result of the special inspections carried out by the Central Bank of Nigeria (CBN) in mid-2009, the extent of the build-up of risk – and the inaccuracy of financial reporting – in the banking system became apparent. Eight banks were intervened in and “rescued” with convertible loans from the CBN, which simultaneously took measures to guarantee all interbank transactions, and replaced senior management and executive directors. These eight banks have not only depleted their capital but together accounted for further losses estimated to be in the order of ₦1.4 trillion (US\$9.3 billion). In addition, even the stronger banks that passed the CBN's stress testing have also had to write-down bad loans and dramatically increase provisioning.

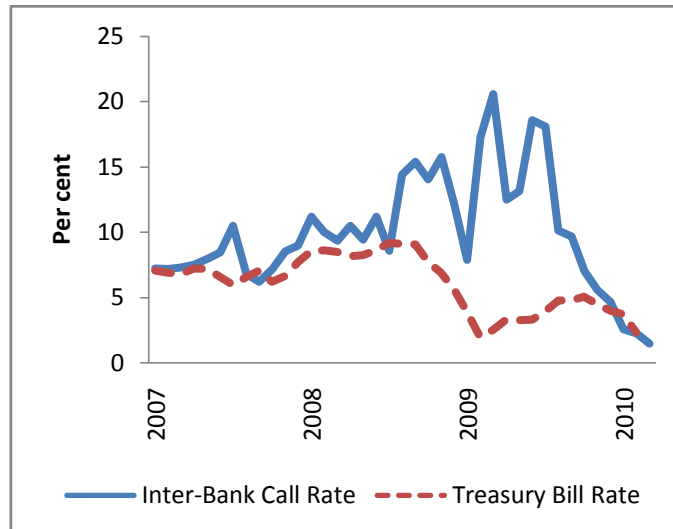
Since mid-2009 the CBN has implemented or announced a suite of measures designed to improve regulation, governance, and transparency in the banking sector, such as a common year-end for financial reporting, implementation of International Financial Reporting Standards (IFRS), abandonment of the universal banking model and introduction of financial holding companies, and restrictions on the terms of executive and non-executive directors. In parallel, the Securities

and Exchange Commission has moved to clean up the securities industry by suspending and prosecuting firms and individuals and by restructuring the management and governance of the Nigerian Stock Exchange (NSE).

Lastly, the National Assembly recently approved the establishment of the Asset Management Corporation of Nigeria (AMCON), which will purchase toxic assets from banks and/or recapitalize distressed banks where this is required to support their sale to new investors. By relieving banks of the management burden of dealing with distressed assets, and by cleaning up their balance sheets sufficiently to allow them to raise new capital, AMCON has the potential to encourage renewed credit growth. The possible entry of strong strategic partners through acquisition of the distressed banks also offers an important opportunity to inject the skills and technology required to prudently expand lending.

However, several key aspects of AMCON's operations remain to be defined:

- The formula determining the price at which AMCON will purchase assets from banks must be set in a way which carefully balances providing a fair value for assets against a too-generous formula which allows banks to “dump” assets on the taxpayer, potentially transferring value from the taxpayer to shareholders. A correctly set price should, thus, inflict some pain on banks selling assets to AMCON, but not so much that banks do not use the facility. A price which gives AMCON some reasonable probability of recovering the amount paid to a bank for assets – but not of making a significant profit – would be the optimum.
- The CBN is concerned about the problem of how to deal with small shareholders of the banks – whom it can be argued were simply victims of widespread fraud which the authorities failed to prevent. Dealing with such an issue is extremely difficult. Considerable public resentment can be expected if the banks' shareholders are “bailed out” by AMCON. It is vital that shareholders do not receive compensation – if they do, serious moral hazard would be created and a large measure of the beneficial effects of the shock recently delivered to bank management and shareholder (improving governance) would be lost. In this context, it is important that the CBN focuses on improving the regulation and supervision of banks to ensure that shareholders and depositors are well protected in the future.

Figure 2 : A Flight to Quality Takes Place**Treasury bill and interbank call rates plummet**

Source: CBN 2010

A flight to quality by lenders and borrowers

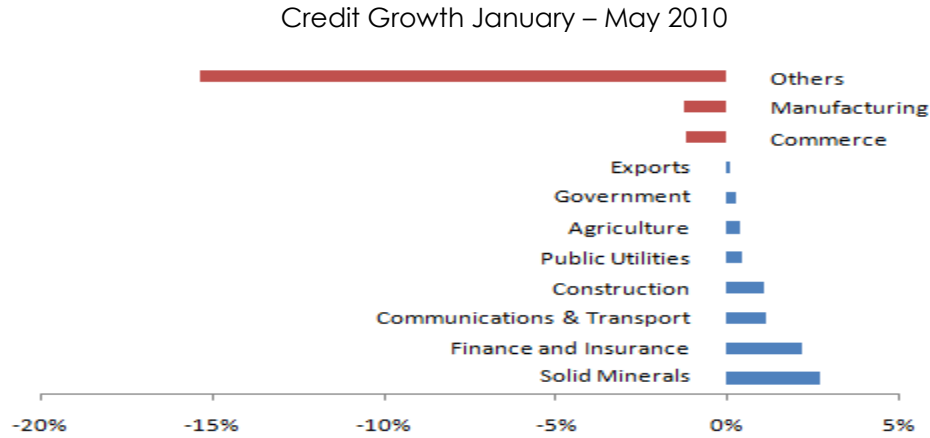
Following the CBN's special inspections, the banking sector "went into shock" and a general flight to quality took place: on the part of depositors to the largest and best managed banks which had survived the mid-2009 inspections, and on the part of banks to cease lending and redeploy their funds into government securities and the inter-bank market. As a result, by early 2010, banks began to rapidly accumulate liquidity, and treasury bills rates plummeted, with the interbank call rate falling to 1.1 per cent and 1 year Treasury bill to 4.2 per cent by mid-August 2010, from 4.5 per cent and 20.4 per cent, respectively, a year earlier.

Has credit been squeezed?

Within such an environment one might expect to see a tremendous contraction in credit to the private sector. Indeed, there have been complaints in the Nigerian media that the real sector faces an unprecedented credit squeeze as a result of banks' withdrawal from lending, with attendant negative consequences for growth and employment. However, these complaints need to be assessed with caution. Analysis indicates that while total credit did contract in the first five months of 2010, this contraction (overall 9.5 per cent) was highly concentrated in a single category "Others" which contracted by more than 15.0 per cent. At the height of the boom, this category accounted for more than 30.0 per cent of bank

lending and is believed to be primarily share-purchase margin loans. The contraction in this category is, therefore, predominantly the result of banks taking provisions and write-offs against margin loans in recognition of the diminished value of the underlying share collateral.

Figure 3 : Credit is still growing in most sectors

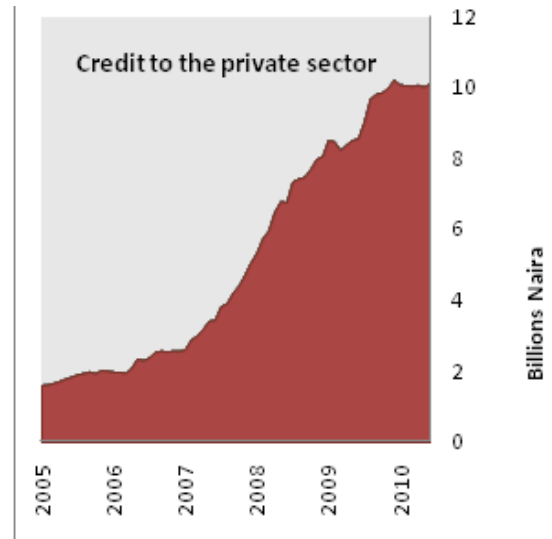


Source: Central Bank of Nigeria 2010

The real sector appears to be unaffected

While total credit to the private sector (Figure 4) flattened in nominal terms in the early months of 2010, lending to the real sector¹ continued to increase in nominal terms – indicating that it remained flat in real terms – and over the longer period of January 2009 through May 2010 has in fact increased in both real and nominal terms. Credit to the financial sector also increased reflecting banks’ deployment of increased liquidity into the interbank market and more recently in solid minerals sub-sector.

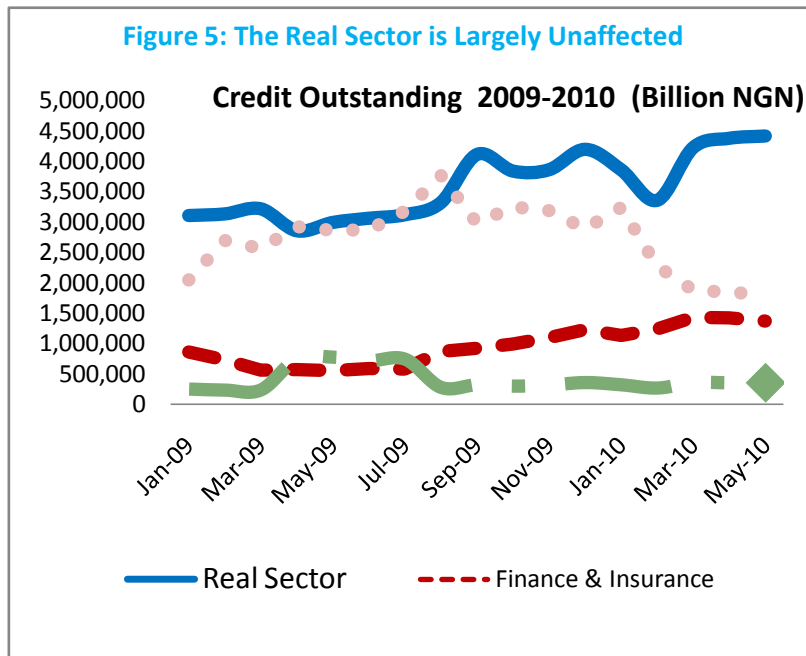
Figure 4 : Credit has not been squeezed



The data indicates that the real sector in

¹ The CBN’s credit categories of: Agriculture, Exports, Manufacturing, Public Utilities, Solid Minerals, General Commerce, and Real Estate & Construction.

the aggregate has not experienced a credit crunch of any magnitude, although lending to manufacturing and commerce, both important areas for job creation has contracted. The CBN has taken steps to cushion the potential fallout from this development.



Discussions with bankers reinforce the conclusion that real sector credit has always been highly concentrated in approximately 60 large, “blue chip”, Nigerian and multinational firms and the post-crisis banking system has returned to its traditional focus on these firms. To the degree that credit standards have tightened, the “losers” have been small and medium enterprise (SMEs) “entrepreneurs” in commerce and manufacturing, who were able to secure credit during the boom years from banks. Following the special audits, as the banks reigned in their excessive lending, they also withdrew credit lines to these SMEs in the process. Indeed, were the provisions taken against loans to such borrowers from August 2009 to May 2010 period, which was excluded from the analysis, the expansion of credit to blue chip firms would likely be shown to have continued at its usual annual rate.

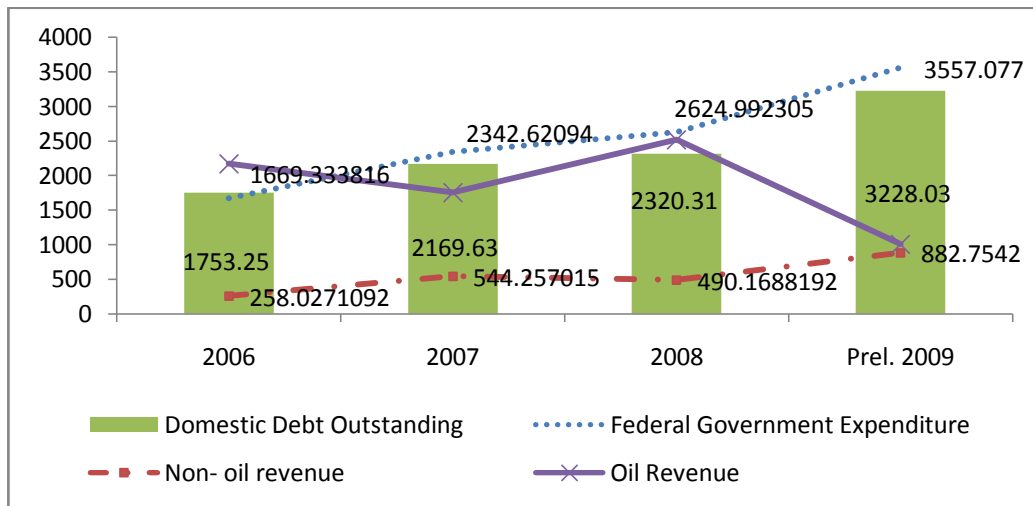
Is real sector lending being “crowded out”?

The incentive for banks to expand their lending to the real sector is driven by the current pressure on their earning capacity, particularly the recent quite dramatic

drop in money market and government security interest rates – i.e. the interest earned on alternative 'safer' assets (Figure 2). Experience suggests that Nigerian banks are keener to invest in safer assets and avoid the risks associated with expanding their loan books. This behavior is likely accentuated both due to current political uncertainties and the recent write-offs they have experienced, even though the latter were not a result of real sector loans going into default.

Unfortunately, the process of crowding out is already very much in evidence. Maintaining the balance of incentives to the advantage of encouraging banks to increase their lending to the real sector will be a major challenge in the coming months. As shown in Figure 6, Government oil revenues declined considerably in 2009 while government expenditure has continued to climb inexorably higher. Government filled its financing gap through the increased issuance of treasury securities. This has led to a situation where total debt outstanding has gradually risen. As most of this debt is financed domestically, it has started to crowd out the private sector.

Figure 5 : Trends in Federal Govt. Expenditure, Revenue and Government Debt Stock (N'Billion)



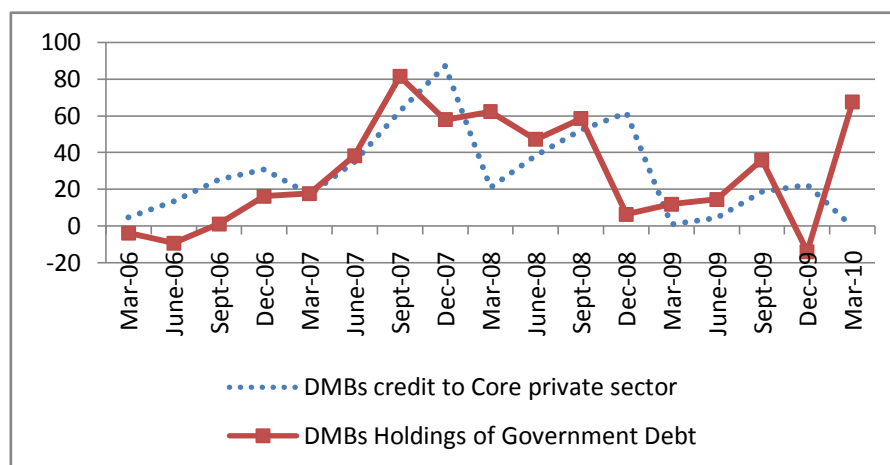
Source: DMO, FMF, IMF

Following the bank consolidation process, banks rapidly expanded both their lending to the private sector and their holdings of Government securities in 2007 and through most of 2008. Subsequently, loan growth has flattened, but of more concern is that banks are already rapidly accumulating Government securities (Figure 6). Unless the Government can rein in its deficit and, thereby, contain its

reliance on treasury securities as a source of funding, there is every reason to expect that the Government will be obliged to pay higher interest rates on treasury securities and the banks will once again prefer the secure returns on such securities rather than develop skills to enable them to expand responsible lending to the real sector.

Based on the above analysis we come to the conclusion that there has not been a sizeable reduction in credit to the private sector. Commercial banks have reacted predictably to changing market conditions and increased scrutiny on the part of the regulator. Non-performing loans are being purged from the system and banks are replacing some of their disastrous margin loans with sounder support for communications, construction and solid minerals. Nigerian banks are also placing excess liquidity with the central bank as well as the interbank market (which remains guaranteed by the central bank). However, as rates on these assets have plummeted dramatically over the last year, this strategy is unsustainable, if banks are to maintain positive returns for the shareholders. Thus, going forward banks will be forced to build their loan books in order to remain viable and profitable.

Figure 6 : Growth in DMBs core private sector credit and holdings of Domestic Debt ^{2/} (per cent)



Source: DMO, CBN

Of overriding importance is that the Government maintains a very close watch on its fiscal deficit. Should the deficit continue to grow, the Government will be obliged to revert to increased borrowing leading to increased issuance of

^{2/} Growth is measured over preceding December stock levels.

Government securities and upward pressure on domestic interest rates (Figure 6). Rather than lending to private sector clients, whom they perceive as risky, banks will prefer to purchase Government securities and lending to SMEs will diminish.

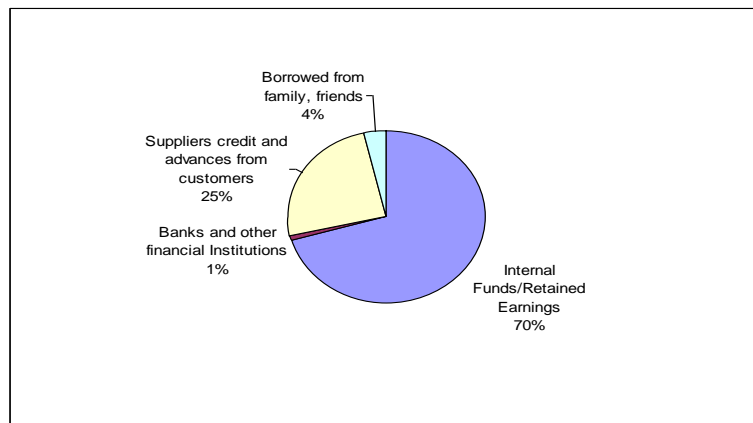
Within this context, it is important that the future expansion of the asset side of the banks' balance sheets in the future takes place in a prudent manner in order to sustain the long run expansion of the real sector of the economy. The following section presents a framework on the strategy and some suggestions that policymakers can consider for implementation to improve the situation.

III. Sustainable and productive expansion of real sector financing

Capital is a vital input to any business. However, for most of the years analysed the real sector is starved of formal sector credit. Of the more than 80.0 per cent of businesses that wants to access a bank loan, only 1.0 per cent is successful (see Figure 7). These figures are in stark contrast to more dynamic economies such as China, India and Indonesia where more than a fifth of businesses are able to secure bank loans and India and South Africa where more than one-third can. The situation is especially dire for Nigeria's SMEs and informal businesses (Figure 8).

Figure 7 : Nigerian businesses do not have access to formal sector credit

Sources of short term finance for Nigerian formal sector businesses

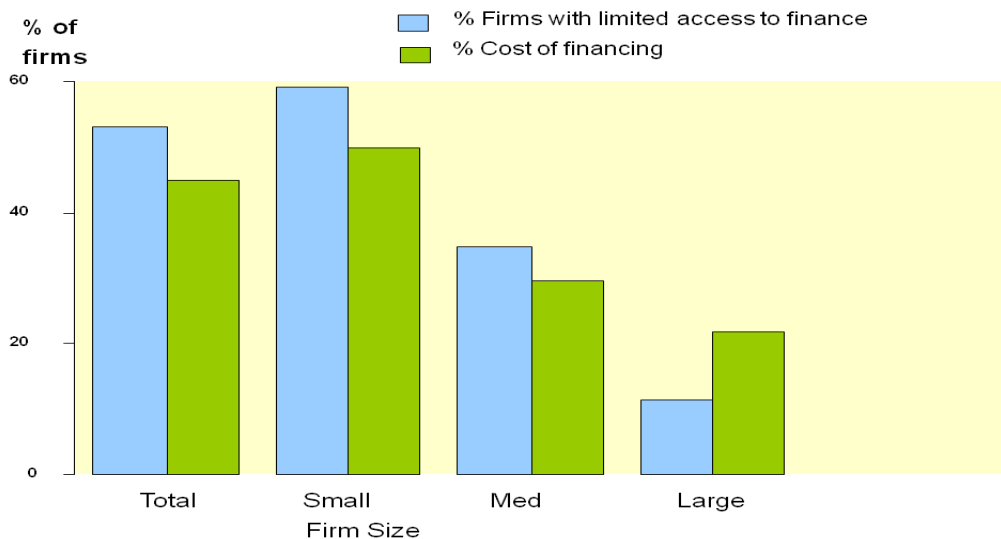


Even Nigeria's large formal sector businesses find it difficult to access finance and the cost of finance. Those that can access loans are limited to loans of 21 months average duration while many competitor countries can access loans of two or three times the duration (Table 1).

Table 1: Cost of Debt and Duration in International Comparison

	Nigeria 2008	Brazil 2003	China 2003	India 2005	Indonesia 2003	Kenya 2007	S. Africa 2003
Average annual interest rate	14	22	5	12	14	15	11
Real Interest Rate (Using GDP Deflator)	6	11	5	8	9	15	0
Duration (months)	21	42	49	49	23	38	68

Source: ICA Survey and World Development Indicators

Figure 8 : SMEs face the largest hurdles

Source: ICA Survey 2009

Nigeria's smaller businesses face particular hurdles to accessing finance. They are not able to access loans, they cannot easily raise a mortgage on their housing or land to finance their enterprises nor do they have access to reliable and adequate infrastructure to produce goods and get them to the market. These are the priority areas to address in order to expand real sector financing in Nigeria:

- Expanding access to credit for small and medium-sized enterprises (SMEs);

- Increasing the housing finance market; and
- Expanding the supply of medium- and long-term credit for both businesses and private participation in infrastructure investment.

For each of these issues, a summary of constraining factors is provided below along with an analysis of the measures that have already been undertaken by the government and recommendations for measures which would increase the supply of credit. In many of these areas, far more detailed analysis and recommendations have previously been prepared by the World Bank in the course of its support for FSS 2020, and are appropriately referred.

Access to credit for SMEs

Following years of losing international competitiveness, the Nigerian SME sector is fragile, operating in a business environment that presents considerable challenges (e.g. poor infrastructure, low skills and weak regulatory environment). This caused the overall share of SME contribution to GDP growth to halve (from 8.4 per cent to 4.6 per cent) between 1980 and 2005.³ The SME sector in Nigeria is much smaller than in other developing countries, with MSMEs (including microenterprises) accounting for close to 50.0 per cent of GDP (compared to 80.0 per cent for many developing countries), (National Bureau of Statistics). Manufacturing as a whole is estimated to account for less than 5.0 per cent of GDP, with SMEs accounting for half of this.

Why Don't Banks Lend to SMEs?

There is a consensus within the banking sector regarding the constraints on SME access to credit. These constraints fall into three broad categories: (a) infrastructure constraints, (b) supply-side constraints, which relate to the incentives for banks to lend to SMEs; and (c) environmental constraints, which reflect the combination of institutional, legal, infrastructure, and capacity problems which make SME lending cumbersome and risky:

- **Infrastructure constraints:** Nigerian businesses claim that they are forced to produce their own power, water and sometimes roads as well as providing security for their businesses. This is confirmed by a recent World Bank survey that revealed that 99.0 per cent of Nigeria businesses owned their own generators. Given the enormous costs of providing such basic amenities, SMEs struggle to compete with cheap imports or finds it difficult to offer services at a cost that is affordable to the consumer. Bank

³ Malik, A. and F. Teal, "Towards a More Competitive Manufacturing Sector", in Collier, et al, 2008.

managers support this analysis and are, therefore, reluctant to lend to SMEs or have trouble in finding viable SME investment opportunities. Although this is a key constraint, analysis of infrastructure weaknesses are beyond the scope of this paper.

- **Supply-side constraints:** Nigerian banks have historically enjoyed very high net interest margins as a result of four main factors. These are poor fiscal management resulting in high rates paid on government securities; high demand for credit for speculation in the years 2006 to 2008; high interbank rates as a result of liquidity pressures on poorly-managed banks with large volumes of non-performing assets; and, the shortage of competing non-bank savings products (such as money market funds) to put upward pressure on bank deposit rates. As a result, banks were able to charge high real rates of interest while paying most depositors negative real rates. Well-managed banks have thereby been able to earn high rates of return without actively seeking to downscale their lending activities: the risk-adjusted marginal profitability of SME lending has been negative relative to lending to other banks, lending to blue chip firms, or lending to the government and, accordingly, banks have not experienced any incentive to make the investments required to build capacity to lend to SMEs.
- **Environmental constraints:** The environmental constraints on lending to SMEs are numerous and require deep-seated reforms to address. These include a very weak creditor rights regime, where debts require a time-consuming and expensive process to secure, and even then provide only limited certainty of enforcement; a lack of credit information on which to base credit decisions due to the only nascent operation of credit bureaux and lack of a functioning national identity system; dysfunctional and manually-operated collateral registries; and widespread irregularities in the police and judiciary, exposing lenders to an unreliable court system during debt enforcement. In combination, these factors create a high cost/high risk environment for SME lending, driving down its risk-adjusted marginal profitability and making it unattractive relative to other credit activities. The environment is made more risky by difficulties in extending and collecting trade credit which drive up working capital requirements and restrict sales growth, and the problem of securing title to real estate assets, limiting the ability of SMEs to provide bankable collateral.

Why Don't SMEs Borrow from Banks?

Many Nigerian businesses that require credit do not apply for bank loans and rely instead on their own internal resources thereby drastically limiting their growth potential. They offer four reasons for not applying for loans; (i) short maturities, (ii) high interest rates, (iii) inaccessible collateral requirements, and (iv) cumbersome loan procedures.⁴ However, even within this environment banks have found ways of overcoming these constraints making it attractive to move down market by changing the business model and adopting new techniques such as those championed effectively by one Nigerian bank (Box 1).

Previous Attempts at Addressing the Problem

Nigerian authorities have long struggled with the problem of how to expand credit to SMEs. A few notable schemes have been piloted largely with poor results. They are explained briefly as follows:

- **NACRDB:** The Nigerian Agricultural Cooperative and Rural Development Bank emerged from a merger between various public sector forerunner banks. It is focused on lending to SMEs in the agricultural space. The bank is hampered by inadequate governance structure, insufficient emphasis on selection of clients, poor loan recovery, concentration on government structures and partnerships, and inadequate range of products. The bank loans are seen as part of the national cake and are rarely repaid (70.0 per cent non-performing loan portfolio) which has further weakened the credit culture in rural areas. The bloated branch network and staffing results in a situation where the overhead costs represent 150 per cent of net new lending. The capped interest rate (8.0 per cent) has led to the bank making structural losses which have eventually led to its effective bankruptcy.⁵
- **SMEEIS fund:** The Small and Medium Enterprises Equity Investment Scheme was launched in 2001. It mandated commercial banks to set aside 10.0 per cent of their pre-tax profits to be invested in SMEs. As the banks were not consulted prior to the launch of the scheme and had neither the appetite nor the know-how to take equity stakes, most investments yielded a poor return. The CBN failed to sufficiently monitor the scheme closely and the banks gradually and quietly abandoned the scheme long before it was officially closed down.

⁴ World Bank Investment Climate Assessment 2009.

⁵ A complete analysis of NACRDB including a menu of reform options and a governance review was concluded by the World Bank and presented to the Federal Ministries of Finance and Agriculture in 2009.

- *CBN Agricultural Fund*: This scheme guarantees up to 87.5 per cent of banks' lending to the agricultural sector (75.0 per cent guarantee plus another 12.5 per cent based on surrender of collateral in the form of government deposits). The guarantee has since 2005 been combined with an interest rate rebate of 40.0 per cent for those borrowers servicing their loans on time. However, despite these assurances, banks have only developed limited appetite for lending to this risk-prone sector.
- *CBN SME guarantee facility*: The CBN has been running an SME guarantee

Box 1 : A Nigerian Bank Successfully Grows its SME Business in the Toughest Climate

Unlike its competitors, one Nigerian bank has aggressively sought to capture a large share of the SME credit market. As its large corporate customers paid down their debts and as the bank sought to limit its exposure to single obligors, the bank was forced to look for new markets. The SME market seemed like an enticing opportunity but the bank had neither the systems nor the know-how to tackle the market successfully and like many Nigerian banks already had a checkered history of previous attempts to grow this market segment.

Bringing in international expertise the bank launched new products and value propositions for its customers. Firstly, it scrapped its Commission on Turnover (COT) which effectively penalized its customers for growing their deposit accounts. Charging a tiered, fixed rate for banking its SME customers (capped at ₦6,000 per month) quickly resulted in a rapid growth of the bank's SME liabilities.

The bank then introduced a peripatetic system of quarterly seminars where SMEs gathered together to hear various success stories and gain valuable information and expertise from SME bankers and other businesses. The bank introduced an "entrepreneur's guide book" along with a business club where SMEs could network and develop valuable business relationships. The bank also prospered from the introduction of new clients. The bank sought term facilities from international partners able to provide it with long-term finance at a reasonable cost along with technical assistance support for venturing into non-traditional areas such as agriculture and health care. This allows the bank to provide SME loans with maturities of up to 4 years.

The bank launched an unsecured credit card, building its collections team in the process to ensure that recoveries exceeded planned targets. The SME loans and credit cards proved to be a profitable and quickly growing business segment. To address it, the bank had to introduce new infrastructure and develop new skills for credit, risk management and recoveries. The bank had to be creative in its approach to the market to overcome the existing deficiencies in the local market, the poor physical address system (for client identification) and known weaknesses in the credit information system. However, it has successfully grown the business and proved that Nigeria's SMEs are credit worthy. The bank is facilitating the growth of Nigeria's most dynamic and innovative small and medium sized companies. And until the time that other commercial banks decide to follow suit they are operating without competition.

facility for some years. The scheme allows participating banks to share the credit risk for SME loans with the CBN. However, the banks are not keen to participate. When a loan does go into default, the CBN insists that the banks prove that they are taking action to recover the loan. As such recovery procedures often take several years in court, the current set-up does not encourage banks to make further SME loans.

- *CBN Microfinance fund:* In January 2008, the CBN announced a microfinance fund of ₦50 billion. The CBN also announced that state governments would set aside 1.0 per cent of their budgets to support microfinance. It was not clear whether the state governments had the capacity to establish commercial microfinance organizations and it was not clear where the remainder of the funds would come from. In practice, the scheme never materialized.

A brief review of the various schemes launched in this area indicates that the Nigerian public sector does not have a comparative advantage in the provision of financial services. The theory behind the schemes has often been flawed, e.g. capped interest rates, taxes on commercial banks or state governments. Schemes that appeared promising on paper often ran into hitches once implemented. The schemes are usually not discussed with the stakeholders. Most government schemes have wasted scarce public resources.

In the case of guarantees, the level of guarantees – considerably in excess of the internationally-recommended norm of equal 50/50 risk-sharing – has further weakened the credit culture. Capping the level of government guarantees at around 50.0 per cent is important so as to provide incentives for banks to assess credit risk and to collect on delinquent loans. Where the level of guarantee is too high, the cost of collecting on delinquent credits quickly rises to exceed the value of the banks' exposures. The World Bank Doing Business Indicators suggest that the average cost of recovering a delinquent loan in Nigeria is 22.0 per cent of the loan amount. If banks are offered an 80.0 per cent guarantee and can only expect to recover 78.0 per cent of a delinquent, they simply will not attempt to recover the loan and the guarantee scheme will result in a huge number of defaulted loans being transferred from the balance sheets of the commercial banks to the CBN or Federal Ministry of Finance.

Most importantly, the schemes have never been actively monitored or evaluated to determine their strengths and weaknesses and, therefore, the lessons of failed attempts have never been captured or internalized before embarking on the

next scheme. This has resulted in policy failures. Adopting a more open and consultative approach to policy-making would help to avoid such policy pitfalls.

Supply-Side Constraints: Market-Driven Changes Should Promote SME Credit Expansion

Other countries (such as Kenya and the former communist states of Central and Eastern Europe) have seen rapid expansions in SME lending despite severe business and credit environment problems. The drivers of credit expansion to the real sector in these countries have been threefold:

- i. Restructuring of the banking system to remove liquidity pressures caused by insolvent banks and introduce strong competition between banks (often driven by the entry of foreign banks with technical capacities and products required to downscale lending);
- ii. Maintaining sound fiscal policies to prevent the crowding out of private sector borrowers and ensuring that the marginal profitability of lending to the government remains below that of lending to the private sector; and,
- iii. The commitment of respective governments to credit and business environment reforms building confidence that banks investing in downscaling would see a steady improvement in the overall business environment.

Current trends in Nigerian interest rates point to the emergence of an environment where, *if fiscal discipline is maintained*, banks will face markedly reduced profitability in 2010 and the probability of operating losses – or at best very weak profits – in 2011 and future unless their portfolios can be redeployed from government securities and interbank lending into higher earning assets such as loans.

The short tenor of most corporate loans will also increase pressure on banks' net interest margins by allowing borrowers to negotiate rates downward in the short-term rather than being locked in to high rates, while already very low deposit rates severely limit banks' ability to maintain spreads by reducing their cost of funds. Further to these factors, the resolution of the eight distressed banks should support a significant increase in competition in the banking sector: as in other countries, if these banks are sold to strong strategic investors, the infusion of capital, technology and capacity such investors can provide should sharply intensify competition within the system and, thus, force the pace of downscaling.

The CBN is also moving to increase the supply of SME finance by establishing a ₦200 billion SME loan guarantee fund. The fund would provide a credit guarantee of 80.0 per cent of principal (meaning up to ₦240 billion of loans could be covered) for loans to SMEs with 11 to 300 employees and assets – excluding land – of less than ₦500 million. The maximum loan size would be ₦100 million. The CBN has designed the facility so that guarantees will be paid as soon as a loan becomes non-performing according to the CBN prudential regulations, which responds to banks' reluctance to use the existing guarantee facility due to long delays in receiving the proceeds from the guarantees.

The World Bank believes that the facility is well designed but that a lower level of guarantee should be applied – also allowing greater leverage from the guarantee commitment – in order to provide banks with a greater incentive to monitor and recover guaranteed loans. A level of up to 50.0 per cent is more consistent with successful guarantee schemes operating in other countries.

Increasing Competition also Poses Significant Risks

The potential for rapid transformation in banks' business models as a result of shrinking margins on banks' traditional activities and the emergence of increased competition from strategic investors creates a significant probability that there will be a rapid build-up in risk within the system, with potentially severe consequences. The primary risk faced by the banking system could emerge from bank's moving aggressively into new types of lending as they are forced to seek higher yielding assets: analysts (and many bankers) agree that the banking system lacks the credit and risk management skills required for prudent SME lending on any scale, and given the environmental risks which are an unusually large factor in Nigeria, the possibility of large losses being incurred is high.

While a suite of measures to improve financial sector supervision and regulation have been announced, it is not clear that supervisory institutions have themselves built the capacity to effectively enforce the new regulations (a number of banks raised this concern in meetings with the World Bank). In cooperation with donors, the authorities have designed a comprehensive financial sector capacity building program to address this problem, and start addressing other problems relating to the lending environment, but implementation has been stalled since early 2010. This situation sends a strong signal to the market that the authorities are not really serious about addressing the problems in the banking and securities markets which led to the 2009 crisis and is likely to undermine the willingness of banks to downscale lending if there is no real prospect of any improvement in the environment. Similarly, foreign investors and lenders are likely to remain extremely

wary of Nigerian debt and equity offerings (both of which will be needed for infrastructure and other real sector developments) so long as the supervisory framework remains short of the capacity to enforce international standards of transparency and financial reporting.

In a similar vein it will be important that the authorities move expeditiously and effectively in resolving the situation of the eight banks currently benefiting from the liquidity support of the CBN and CBN's blanket guarantee of all interbank exposures. It is, indeed, encouraging that the legal framework for the Asset Management Corporation of Nigeria (AMCON) is now in place. For example, the authorities will need to deal effectively with the unjustified court challenges being mounted by disgruntled shareholders, in establishing even-handed criteria for setting prices for assets to be assumed by AMCON, and in moving expeditiously to determine which among the eight banks are to be liquidated (passing these to NDIC) and which banks might be able to benefit from intervention by AMCON.⁶

Some Suggestions⁷

A list of possible interventions designed to overcome some of the key obstacles and challenges to SME finance is presented below.

- **Business development services (BDS):** Pilot BDS programs in Nigeria provided by government agencies like the SME Development Agency of Nigeria (SMEDAN) and donor programs such as the World Bank MSME project have been successful in developing the effective demand for credit.⁸ There is also increasing international evidence that providing BDS programs alongside credit schemes results in far more successful development of credit markets. BDS programs can be structured around promising value-chains and matched with access to finance. The programs would address some of the key issues on the demand side such as the ability of SMEs to produce bankable business plans and overcome cumbersome loan procedures.
- **Credit information, identification of borrowers and registration of movable property:** Despite recent progress on this front, more support is needed to

⁶ In March 2008, the World Bank completed analysis on the Banking Sector which highlighted the risks of a potential banking sector crisis and made detailed recommendations on strengthening accounting, reporting and disclosure which remain to be implemented. Following the crisis, the World Bank produced a series of technical notes regarding the bank resolution process.

⁷ A detailed analysis of SME finance, Microfinance and Mobile Banking was completed by the World Bank and presented to government in June 2008.

⁸ A review of Business Development Services in Nigeria, BDO 2008.

improve the regulatory framework, capacity, and equipment in this area. For example, the credit information framework is inadequate in terms of requirements as regards sharing of information so that it can be made readily available to the competing credit bureaux as regards all bank borrowers; the quality of the data available and the capacity of the systems available are also in need of improvement. The development of credit bureaux with a comprehensive information-set at their disposal is essential for deepening of the credit markets. Importantly, this information will allow banks to move away from bank lending based on collateral, which is not readily available to many potential borrowers, is costly and time-consuming to register, and also expensive to foreclose upon in case of a borrower's default. Another major issue for providers of credit information is the lack of a reliable national identity system. Government also needs to push forward the timetable to implement a national identity management system with biometric data as well as upgrading the national street address system. The moveables registry also needs to be strengthened. While the Corporate Affairs Commission (CAC) manages a workable registry of floating claims on company assets, the registry does not identify individual assets, and only incorporated businesses can make use of it. Reforms are urgently needed to improve the registry and legal system for liens on moveable assets.

- **Capacity building/technical support to strengthen the legal and regulatory framework for SME financing:** Based on a needs assessment to be carried out, capacity building and technical support could be provided for necessary reforms of the legal/regulatory framework to support, inter alia, the leasing sector, finance companies, developing commercial courts and/or alternative dispute resolution mechanisms etc.
- **Product/Scheme Innovation:** The consultations held by the World Bank with stakeholders in recent months have made it clear that product/scheme innovation have stagnated in the country and there is a need to draw on successful lessons learnt from other countries and schemes run so far in Nigeria to come up with innovative ways to improve access to finance. In this context, the following proposals are suggested:
 - a. **Bank Downscaling Program:** Nigeria's deposit money banks are not used to lending to SMEs. Most do not have the required infrastructure and human resources required for sound credit and risk management policies needed to successfully serve this market. Technical Assistance

programs along with guarantee schemes and/or credit lines would serve to introduce new techniques proven in other countries to address SME lending.

- b. Credit Guarantee Scheme:** A credit guarantee scheme such as that currently administered by the CBN could play a role in encouraging banks to develop and roll out SME products. It is important that the mechanism is designed so as to rely on deposit money banks for the assessment of credit risk and loan recovery, with the role of the government agency being limited to funding and managing the mechanism. As discussed above international best practice would limit the guarantee to 50 per cent of the credit.
- c. Credit Line:** Through this mechanism a government agency would act in the capacity of a wholesale institution, on-lending funds to a pre-selected group of deposit money banks. The participating banks in turn would make sub-loans to SMEs, thereby, providing needed working capital and investment finance, while taking on the credit risk of their borrowers. This measure would effectively address the need for medium-term financing while being coupled with needed capacity building as regards bank down-scaling and BDS.
- d. Reverse Factoring:** A reverse factoring mechanism could be set up so that large creditworthy firms participating in the program could invite their suppliers to join their chain and post their receivables on line. Participating financial institutions could bid to factor such receivables, with suppliers choosing the best interest quote, while the factor is paid when due by the buyer to the intermediary. The latter would on-lend funds borrowed from a government agency that acts as the wholesale funds provider.
- e. Warehouse Receipt Financing:** The CBN has expressed interest in setting up a system whereby accredited warehouse operators would store a range of graded commodities in exchange for receipts that are transferable and would permit their owners to obtain credit using them as collateral.
- f. Equipment Leasing:** Aside from the support to be provided to strengthen the regulatory and legal framework around leasing activities, further support could be provided to set up a system of

leasing schemes and registered stores to facilitate the leasing of equipment for Nigerian SMEs.

Expanding Housing Finance⁹

It is widely acknowledged that the Nigerian construction sector holds huge potential for the creation of millions of new jobs over the next decade. The construction and real estate sector remains limited: it currently accounts for less than 2.0 per cent of GDP. There are an estimated 16 million units in terms of gap, most of which are needed in Lagos and other large urban centers. This is largely the result of the absence of housing finance. There are an estimated 40,000 mortgages in Nigeria, most of which are held by bank employees. Developing a housing finance market would not only allow this sector to take-off and achieve its potential but it would also allow entrepreneurs to use their property as collateral to raise low-cost, long-term loans that can then be used to finance business ventures as in many other countries.

There are currently a number of constraints to the emergence of a functioning housing finance market, the most significant of which is the time and cost taken to register property. The Land Use Act, 1978, vested the ownership of all land in the Governor of each State. All transactions in property require the consent of Governors and registration with land registries. The process is time-consuming (taking six months or more) and very costly. The total fees have risen to 37.0 per cent of the property value in Ondo state. In aggregate, Nigeria comes in last among 178 countries in the ease and cost of registering property.¹⁰

Despite the unfavorable environment, there is a growing mortgage market in Nigeria. Loans are provided by the retail deposit money banks and to a much lesser extent by the primary mortgage institutions. Loans are financed by retail deposits. The maturity mismatch is largely mitigated by the use of the adjustable rate mortgage and loans rates are typically being tied to banks' prime lending rates. In most countries, a key element of the underwriting process is examining the financial history of the borrower, particularly in respect of his record in repaying other loans. Bankers regard this as the single most important piece of information that they need in order to underwrite loans effectively. In Nigeria, as mentioned above, there are still serious issues hampering the effective operation of the three licensed credit bureaux.

⁹ In March 2008, the World Bank provided a series of reports on housing finance to the CBN including: (i) a detailed analysis of the Nigerian housing finance market, (ii) An analysis of opportunities for low-cost social housing and (iii) a concept paper for a housing finance liquidity facility.

¹⁰ World Bank Doing Business Indicators 2010.

Lenders require the borrower to have clear title for that property and will normally take a legal mortgage, although in some cases they may use an equitable mortgage. To further protect themselves lenders will normally deal with borrowers only from certain specified employers – typically the public sector and large corporations. Mortgage repayments are made by deduction from wages, and there may also be some informal support from the employer.

The result of this situation is that most pieces of land are not registered: in Lagos just 80,000 titles are registered whereas the number should be 4 – 5 million. The main effect of the plethora of controls and taxes is that transactions either do not happen or happen in the informal sector. Transactions in the formal sector are costly and time-consuming, partly because of the efforts that are made to mitigate risks associated with the lending environment. Ultimately, Nigeria's huge real estate assets remain unleveraged and are unable to play a useful role in promoting economic growth and creating new jobs.

Public Sector Attempts to Address the Situation

As in the case of support to SMEs, the public sector has piloted well-intentioned attempts to improve the situation, but again with largely counter-productive results. The most notable public schemes in housing finance include the following:

- *The Federal Mortgage Bank of Nigeria (FMBN)* administers the National Housing Trust Fund (NHTF) provident scheme and also has other functions, although at present it is not a mortgage bank. Like other public institutions its bloated structure (including 8 zonal and 38 district offices) and limited income sources has led to its racking up huge losses.
- *The National Housing Trust Fund (NHTF)* is a compulsory provident scheme, the proceeds of which can be used only for house purchase. The NHTF was established under decree No 3. of 1992 and is designed to ensure access by workers to housing finance. Self-employed workers and employers of workers earning more than the minimum wage are required to deduct 2.5 per cent of wages and pay the amount into the NHTF. The accounts are held in the names of the individuals who should receive annual statements. Contributions receive a rate of interest of 2.0 per cent. By law, the Government and financial institutions are required to contribute to the scheme. The contributions plus interest are repayable at age 60 or on death. After contributing to the scheme for six months workers are entitled to a mortgage loan of up to ₦5 million (US\$43,000), at

a rate of 6 per cent for 30 years. The loan is for a maximum of 90 per cent of value, so the borrower needs to have a ₦500,000 (US\$4,300) deposit. The loan must be used for house purchase, house expansion, or building on a plot which is owned.

This scheme is theoretically attractive to potential home buyers. After saving just 2.5 per cent of their income for six months they can borrow ₦5 million (US\$43,000) at an interest rate of 6.0 per cent, which compares with an open market rate of 17 per cent, to buy a house at significantly below market value. In addition, the house purchase is exempted from some taxes.

However, the scheme has never, and will never, work as designed. The amount raised through contributions is not sufficient to fund loans for more than a tiny proportion of those eligible for loans. The scheme is in effect a compulsory regressive tax: the majority of workers will never earn enough to afford to buy a house. They are being forced to contribute part of their income to a scheme, receiving a return well below the rate of inflation, to finance cheap loans for the better off, most of whom are probably civil servants. The recent changes (rate of interest cut from 9 to 6 per cent, the loan ceiling increased from ₦1.5 million (US\$13,000) to ₦5 million (US\$43,000), the maximum term increased from 25 to 30 years and minimum borrower contribution reduced from 20 per cent to 10 per cent) exacerbated the regressive nature of the scheme.

The scheme has also faced practical difficulties. A loan can be obtained only if the borrower can produce clear title to the property he is buying. This is impossible in the majority of states and accordingly no loans have been made in those states. Loans can be made only through PMIs and there are no PMIs in at least 10 states. In such cases a potential borrower can apply to a PMI in another state, but it seems unlikely that this happens to any significant extent. Many PMIs do not qualify to distribute loans. The FMBN will not disburse through a PMI more than 25 per cent of the PMI's capital, and it requires a bank guarantee for the loans it does disburse.

- *Primary Mortgage Institutions (PMIs)* disburse subsidized loans financed by the NHTF, and these are often combined with open market loans funded by retail deposits. Their role is to collect retail deposits and to make mortgage loans, both on the open market and as the only institutions through which loans from the NHTF are distributed. However, they have

low capitalization and poor governance. They are distrusted by the public, which has meant that they have been unable to raise deposits. Most PMIs are very small, have made no loans at all and engage in various real estate activities to keep themselves going. Some are owned by the states. Most of the larger PMIs are either subsidiaries of banks or are connected with banks. The PMIs currently serve little useful purpose. The CBN closed down a large number of terminally distressed PMIs in 1999 when they took over their supervision from FMBN. The poor quality of PMIs is illustrated by the fact that FMBN checks each loan application, introducing further delay and cost into the system, because it cannot rely on PMIs' procedures. PMIs are likely to lose out to the commercial banks as they become increasingly involved in this area.

Some Suggestions

Phase 1 presents the priorities that are capable of being “quick wins” – essential to put momentum into the reform process. The recommendations are proposed to be implemented within two years. These five recommendations can all be implemented without legislative changes:

- Substantially improve the transaction process by reducing the time taken to achieve the necessary consents and reducing the costs from the current level of 20-30 per cent of the value of the transaction to about 5.0 per cent. This is by far the most important single measure; if action is not taken on this the other measures will not succeed.
- Either abolish the NHTF or significantly reform it so as to redress the balance between contributors and borrowers.
- Substantially increase the capital requirement for PMIs, and make loans through the NHTF, if it is to continue, only to those that meet this and other requirements.
- Increase the capital base of the FMBN and develop its role as the source of knowledge, statistics and expertise on the mortgage market, and facilitator of market improvements.
- Implement through the FMBN a simple mortgage liquidity facility which would help pave the way for the use of covered bonds and mortgage-backed securities in the longer-term.

Phase 2 measures are those that are not essential to stimulate the market and may take longer period to implement due to the need for new legislation. They could be implemented over a five-year period. These are as follows:

- Put in place arrangements through the FMBN that would allow covered bonds and mortgage-backed securities to be issued. This may require some legislative changes.
- Reform the arrangements for foreclosure by one or both of improving current processes within the current legal framework and by providing for extra-judicial procedures.
- Develop a mortgage insurance program in conjunction with a commercial insurance company and facilitate common standards for underwriting and documentation.
- Remove the need for Governor's consent for land transactions, which will entail changing the Constitution or persuading Governors to delegate this power.
- Introduce large-scale land registration programs and facilitate the acquisition of title by existing occupiers of property.
- Introduce comprehensive building codes and provide protection for buyers of houses during the course of construction.

Expanding the Supply of Term Finance

Structural Weaknesses Hinder the Supply of Term Finance

The supply of term finance from private sources in Nigeria is extremely limited. Without an adequate supply of term finance there are extremely limited resources for projects, housing and infrastructure financing. Since SME and housing finance have been addressed above, this section focuses on long-term financing for infrastructure as poor infrastructure is both a cause and consequence of Nigeria's current economic challenges.

Infrastructure finance - a case study in securing term finance in Nigeria¹¹

Infrastructure requires a variety of sources of finance, depending on its scale and complexity. For mega- and large-scale projects of national or transnational

¹¹ A potential World Bank Project to support the development of PPPs for infrastructure in Nigeria has been developed in consultation with FMOF and the Infrastructure Concession Regulatory Commission (ICRC) and is currently awaiting National Assembly and Executive Council approval.

scale, multi-national and large domestic commercial banks, investment banks, international financial institutions (IFIs), and large international and domestic debt and equity investment funds and facilities are all likely to have the asset bases. For small- and medium-scale projects of local and regional scope, a different mix of institutions is likely to be appropriate, including domestic commercial and investment banks, domestic equity and debt funds and facilities, and pooled lending facilities.

Core infrastructure requires reasonably priced, locally denominated, and long-tenor capital. Sources of capital to meet such criteria are typically found in local markets, but may also be accessed in international equity and debt markets, particularly where cost-efficient, mid- to long-term foreign exchange hedging is available, or when foreign exchange risk is borne by infrastructure service beneficiaries through the project revenue stream (e.g., tariffs or taxes). Nigeria also has the option of tapping from IFI and bilateral donor assistance.

The recent international financial crisis has disrupted Nigeria's embryonic market for domestic financing of infrastructure. Private appetite for infrastructure investment is currently low due to such factors as short tenors for finance and high cost of issuance and trading in the Nigerian equity market.¹² In addition, the limited capacity for origination and project development also constrains the amount of financing deployed for infrastructure investment. In Nigeria, there is a very thin and limited long-term financing market: the depth of the Nigerian bond markets, which could offer the principal local source of long-term financing for public infrastructure, is limited. The Federal Government bond market, while growing and vibrant, only has a limited track-record. Domestic banks will, however, need to build capacity to assess and manage long-term credit risk. Similarly, pension and ongoing insurance reforms are encouraging growth in long-term savings as a natural source for long-term investment.

Structural bottlenecks to domestic term finance for infrastructure in Nigeria include (i) the absence of a long-term pricing benchmark, (ii) the absence of fixed-rate loans and securities, (iii) limited bank loan maturities, (iv) the absence of a corporate bond market, (v) lack of secondary market liquidity, and (vi) minimum rating and listing requirements for eligible investment by pension funds. In addition, the capacity to assess, structure, and monitor infrastructure project risks is severely limited across the commercial banking sector.

¹² PPIAF, "Financial Institutions Appetite for Nigerian Core Infrastructure Financing in the Wake of Global Financial Crisis: The Short, Medium and Long Terms." Draft. June 2009.

However, recent corporate bond issues suggest that investors – particularly the developing pensions and insurance sectors – have demand for longer-term securities. For banks, term lending remains difficult due to the structure of their deposits, only 30 per cent of which are term deposits, and only a very small proportion are for longer than one year. Depositors' reluctance to provide term deposits reflects concerns about macroeconomic stability (inflation and devaluation) as well as limited confidence in the banking system.

One measure which might help to address this problem would be the development of active markets for interest rate swaps and foreign currency hedging instruments so that banks could prudently finance term lending with shorter-term liabilities and/or seek term financing in foreign currency which could then be lent in Naira to Nigerian non-exporters. In March 2010, the Government has moved to increase the supply of term finance for manufacturing, power, and aviation by providing a ₦500 billion of 10 to 15 year with 7.0 per cent fixed rate on-lending facility from the Bank of Industry (banks will borrow funds at 1.0 per cent to on-lend). The response to the launch of the ₦200 billion manufacturing sub-component of this facility has been very successful (₦111 billion has been released out of ₦130 billion that has so far been approved, with a further ₦90 billion in the process of approval). The take-up on this generously-priced longer-term funding has been impressive. The banks are given extra 'breathing space' to restructure their loans rather than declare them non-performing. However, the fiscal cost and potential distortions created by such favorable lending schemes will be considerable.

Some suggestions

Given the size of Nigeria's infrastructure deficit (estimated at US\$100bn) and the limited nature of public resources, it is clear that tackling Nigeria's infrastructure financing will require a successful public-private-partnership (PPP) model. There are encouraging models of successful PPP projects in Nigeria, most notably the MMA2 domestic air terminal and the Lekki Toll Road both in Lagos. These projects indicate that Nigeria can successfully achieve this agenda. However, before embarking on measures to address infrastructure financing challenges, government must focus on developing the necessary skills and expertise required to develop a pipeline of PPP projects, strengthen the legal and regulatory framework for PPPs and then develop the necessary framework for project implementation. As far as the financing of the identified projects is concerned, it will be crucial to instill market confidence. With this aim in mind it is recommended that the authorities embark on the following reforms:

Phase 1 to be implemented within the first 18 months include:

- The institutional strengthening of SEC in the areas of regulation, supervisory capacity and enforcement of intermediaries, collective investments, and listed issuers.
- The institutional strengthening and development of the supervisory framework for the main market infrastructure institutions: the NSE and the CSCS.
- Addressing regulatory weaknesses in selected priority topics: clearing and settlement; corporate governance of issuers and the development of the corporate bond markets.

Phase 2 to be implemented in 1.5 to 5 years include:

- Institutional strengthening of SEC governance bodies and a more formal implementation of a risk-oriented supervision model.
- Improvement of the listing framework to increase the number of IPOs.
- Implementation of the demutualization strategy and the clearing and settlement model.

Lessons of Financial Sector Regulatory Reforms and Challenges of Real Sector Financing: A Regional Perspective

*Jonathan A. Aremu, Ph.D**

I. Introduction

Financial intermediation and financial services industries have undergone many changes in the past two decades due to deregulation, technological advances and globalization. The changes included consolidation within and across markets, greater cross-border financial services provision, the emergence of new financial products and alternative wholesale markets and trading systems, a redefinition of the role of traditional financial services providers, and the use of new distribution channels, including e-finance. These changes have been triggered by regulatory changes/reforms notably by: liberalization (locally, regionally, and globally), market forces, and technological advances. In turn, these changes have led to new regulatory reforms as well as challenges particularly in developing countries such as Nigeria.

The framework for regulating financial activities has also seen many changes, with approaches to adapting to new challenges arising from both regional and global economy. Developing countries, like Nigeria were not spared from the effects of the global economic recession brought about by: the exit of portfolio investors that led to a sharp depreciation in the value of quoted stocks in the Nigerian Stock Exchange Market, reduction of export earnings, lower foreign direct investment (FDI) inflows, among others. In response to these, the Nigerian government adopted new regulations to ensure efficient and sound financial intermediation as well as to address the demand of the changes affecting financial sector and to address the lessons learnt from the financial crisis.

Since after the turmoil, phrases such as systemic risk, oversight and macro-prudential regulation have become the new touchstones for a repaired regulatory framework in many countries. These developments call for renewed efforts to redefine the regulatory philosophy and principles around a different mould at national, regional and global financial systems. While it is understood that to bring out any paradigm shift would require an equally weighty intellectual case for an alternative model, it would, however, be imprudent to ignore the

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basic lessons of the financial crisis, which is that the existing framework before the crisis had severe pitfalls justifying substantial reforms. This is why efforts to strengthen and develop the country's financial system require an assessment of the financial services required by Nigeria as it moves towards the desired new economy under Vision 20:2020. This in addition entails an assessment of the implications of the forces of change in the global, regional and domestic environments. While opportunities have emerged in these new environments, threats of the regional and global marketplaces are becoming more intensive, as both regional and global players as well as technology advancements the world over are having an unprecedented impact on the approach of providing banking and other financial businesses.

It is understood that the likely positive impact of financial liberalization include: (a) capital flowing from capital – rich developed countries to capital – deficient ones, directing savings towards productive investments, (b) increased competition among economies as they strive to offer better opportunities for savers as well as lower costs to borrowers; (c) development of new financial instruments such as derivatives (futures, swaps and options); (d) the markets would provide a healthy discipline for governments in terms of fiscal discipline, better economic policies and performance; and (e) the long – run result would be higher investment and growth in the liberalized economies (McKinsey and Company, 2007).

These five positive views are somewhat clouded by the possibility of marked increase in financial fragility explained earlier. Consequently, the benefits of financial liberalization must be weighed against the costs of increased financial fragility. This of course is why some economists have argued that some degree of financial regulatory reforms is still inevitable and in fact preferable to premature liberalization in developing countries (Schnabl, 2008). The purpose of this paper is to review both the general regulatory challenges as well as the specific issues facing Nigeria in terms of adapting to the various financial sector regulatory reforms both within the financial services industries in national and regional environment as well as coming from international regulatory norms. The remainder of the paper is, thus, structured into five parts. Part II examines the changes in financial systems of today that make regulatory reforms inevitable. In Part III, an attempt is made at addressing issues and challenges of financial regulatory reforms in developing countries. A brief analysis of challenges facing the Nigerian economy in its financial regulatory reforms with emphasises on the real sector is made in Part IV. Part V of the presentation addresses the issues of regional financial regulatory reforms under the Economic Community of West

African States (ECOWAS) with particular reference to the regional payments system of ECOWAS Commission and part VI concludes.

II. Changes in the Financial Sector

In theory, the arguments for financial reforms towards liberalization appear uncontroversial because based on exacting assumptions, financial globalization has the potential to raise economic growth and lower consumption volatility. In addition, it could exert some level of international disciplinary effects on the conduct of national macroeconomic policies particularly: (a) if international capital flows become more important for national economic development; and (b) if the capital flows respond negatively to bad monetary and fiscal policies. However, what is theoretically sound and logically possible may be impracticable, particularly when the credits assigned to financial liberalization are premised on economic assumptions as usual. One thing that is clear is that with the recent financial crisis, the benefits of capital account liberalization to the recipient economy are inconclusive as some economies seem to experience a **costly boom-bust cycle** after liberalization. In particular, economies that are less able to control domestic agency problems, like in most developing countries appear to have a higher likelihood of crisis.

Therefore, what we observe is a pattern of a boom-bust cycle in investment, asset prices, and output preceded by financial liberalization. This is why a survey of some key changes in financial systems as well as financial services; in addition to what is driving the changes is examined below.

II.1 Deregulation

The last two decades had witnessed dramatic changes in the financial landscape in which market forces, due to globalization and supported by inevitable regulatory changes as well as technological advances have led to substantial changes in the operational modalities of most financial systems of the world. These changes have, to a large extent been triggered by the removal of controls over financial sector activities and institutions in all countries of the world including the Nigerian economy. The progressive elimination of barriers between different types of financial services providers in the country, the removal of barriers of entry and the elimination of product restrictions has led to more competition in financial services of the economy. In addition, the establishment of cross-border activities of Nigerian banks in member states of the Economic Community of West African States (ECOWAS) as well as to other parts of the world had compelled these banks to be competitive.

The consequent broadened markets, within and outside the economy to other ECOWAS countries have triggered large changes in market structures of Nigerian banks. In addition, the bank consolidation exercise in the country, with its waves of merger and acquisitions, allowed the banks to take advantage of larger markets to reap the economies of scale advantages and/or positioned them against a more intense threat of competition domestically and across borders. Furthermore, inter-industry changes have occurred in the Nigerian financial system under universal banking which abolishes the legal separations between commercial banking, insurance and investment banking activities.

II.2 Technology

Changes within the Nigerian financial system were not confined to deregulation alone. The changes have been due to rapid information, communication and technological (ICT) innovation within the financial services industries, with deregulation catching up. It is not just that technology today provides an increased ability to engage in high-level financing (e.g., credit derivatives), but it also allows cheaper production and better mainstreaming of financial services for households and smaller size firms in Nigeria. In turn, cost advantages have been passed to consumers in the form of lower margins and better quality services. Technology has equally allowed for financial institutions in the country to deliver their services at greater distance, through **on-line services**. The development in ICT is making cross-border provision of financial services easier and cheaper, e.g., improvements in ease and costs of international remittances over the last few years.

Besides the costs gains for consumers and firms, technology has allowed for the emergence of new financial markets and trading systems (such as the various stock trading systems), and complete new forms of financial products. Technology has also affected market structures in many ways, directly and indirectly. The direct effects are many, such as the entry of new financial services providers, e.g., those providing aggregation services putting multiple account information and transaction capacity in one place. Technology is further facilitating the blurring of financial services as financial products can more easily be created, adjusted to user preferences, and delivered. Technological advances have also enhanced the ability of Central Bank of Nigeria (CBN) to better monitor Nigerian banks. With better supervision helped in part by technological advances, freeing up banks without inducing instability has become easier for the CBN as the regulator of the industry.

The combination of the deregulation and technological changes is leading to many institutional changes, besides changes in market structures. For instance, new forms of financial services providers have emerged, such as e-brokers and aggregators, and the breadth of financial services available for firms, households, and specialized groups such as lower net-wealth investors, has increased. Deregulation and technology have led to more complexity and new risks. Many large banks have become risk managers, rather than traditional providers of financing and liquidity services. New products have been introduced for which risk management systems are still lacking or only being introduced late even as markets are already large, e.g., credit derivatives. Other new risks come up on a regular basis. For example, in settlement and clearing systems due to greater cross-border trade with associated legal uncertainties, new risks have arisen. All of these have led to **new challenges** for the design and implementation of financial regulatory reforms and supervision in many countries including Nigeria.

III. Challenges for Financial Regulation Reforms

Changes in financial services sector have generally led to improved outcomes in terms of more efficient financial services provision, greater diversity of financial services, and greater access to diversities of financial services. Yet, these developments are also simultaneously leading to new challenges facing financial sector regulators such as the CBN as well as other policymakers. These challenges relate in large part to financial stability as new systemic risks arise. In addition to this are other emerging issues in terms of how to make the financial markets function properly, in the sense of delivering the best possible financial services at the lowest cost to different consumers.

For both stability and efficiency purposes, there has consequently been a parallel trend to adapt existing regulations and adopt new regulations in some areas ("re-regulation") to ensure well-functioning financial systems and markets. The design and applicability of these new regulations have been subject to many discussions. Issues arising have been various, but include: the overall approach to financial sector regulation and supervision in the light of changes in the special nature of banks; competition policy in financial intermediation; consumer protection; the costs of regulation; and further harmonization of rules and practices at regional and multilateral levels.

III.1 Overall Approach and the Emerging (Special) Role of Banks

It is now clear that financial liberalization meant that banks and other financial institutions have moved from being under close control of the monetary authority with little competition to a different terrain where **they only need to satisfy**

minimum prudential standards of the monetary authorities with more general supervisory oversight and enforcement of good internal risk management practices. Recall that in the late 1980s to 1990s, in both developed and developing countries, financial liberalization led to vulnerabilities and even in some cases financial crises at national and regional levels. This was understandable as due to markets' participants (banks and non-banks financial institutions) and supervisors (in case of Nigeria, the CBN) who were just learning slowly issues in the new world of financial liberalization as well as due to ill-designed financial liberalization efforts at national and regional levels. The disturbance of early 1990s in the Nigerian financial system could be traceable to this fact that while in most developed countries, banks and other financial institutions were able to withstand the shocks relatively unscathed, it was not the same in the Nigerian context.

Apart from the fact that financial markets' participants as well as the supervisors in the economy were slowly "learning" the new world of financial liberalization, many of the problems were due to ill-designed financial liberalization efforts at national level. For instance, some financial crises were triggered by failures of non-bank financial institutions that engaged in financial transactions outside their core functions, a replica of the 1993 episode in Nigeria.

No doubt, each crisis in Nigeria has taught the CBN new lessons as well as triggered adaptations to better financial regulations. In spite of these, however, thinking ahead of what new risks may arise and how to prevent serious impact remains nevertheless a challenge for the regulatory authority (just like in any economy of the world). This is why the full set of issues of financial stability and related implications for financial regulation and supervision are beyond this paper. However, there are clearly some general trends underlying the recent changes that require adaptation of approaches at the level of the CBN, the level of the overall financial system of the country and at the international level. Many of these changes relate especially to the emerging role of banks as they affect the real sector of our economy under the dynamic circumstances constantly facing them.

Though the role of banks has expanded in recent decades, at the same time, banks have simultaneously shed some of their more traditional forms of financial intermediation. For instance, today banks are becoming more risk managers rather than straightforward financial intermediation. In addition, financial institutions most often organized around "banks" are now engaged in a broad range of complex financial transactions and operate in various markets- banking,

insurance, and capital markets- to take on and lay off risks on behalf of their customers. Under these new roles banks underwrite complex financial transactions, provide specialized over-the-counter hedging and risk management products, and are engaged in highly-leveraged financing operations. They equally help to place financial instruments with other, nonbank financial institutions, such as institutional investors, and take on many advisory roles. The increased roles of banks as risk managers suggest a market response and the exploitation of natural comparative advantages. These recent changes in financial services provision calls for continuous innovation of the central bank monitoring techniques.

These developments call for new regulatory issues for the central banks all over the world. For one thing, the degree and nature of spillovers among financial institutions and through financial markets has become much more complex to predict measure and manage by the central banks. In the past, spillovers of a financial institution running into financial distress on other financial institutions might have been easy to predict by regulatory authority, as the bank engaged with a limited number of clients in a significant way. However, today in many financial markets, spillovers are much harder to predict. Even the relatively straightforward analysis of predicting how turbulences get transmitted through the interbank market activities has become quite complex because of the activities of making actors and agents. Exposures have become so much more complex in the Nigerian economy. The broader issue of how liquidity shocks get passed on through various financial markets has become even harder to analyze as the transmission mechanisms are so much more complex today.

This development justifies the recent CBN initiative to review the **Universal Banking** framework by emerging with **cylinder approach**. This approach involves treating commercial and investment banks, insurance companies and securities markets intermediaries as separate institutions with their own set of regulations and separate forms of oversight. While the CBN is right to some extent on this reversion, the close congruence between commercial and investment banks in most financial systems of the world as well as the close links between insurance corporations and commercial banks suggests, however, that risks from one area of the system may not necessarily be possible to be isolated to one type of financial institution. Consequently applying standards and supervision by separate types of financial institution has its own problems these days. Instead of a cylinders-approach, therefore, a more general risk management approach will be needed, at the micro and macro levels. What appears desirable because of the increasingly complex ways through which financial risks are being managed

by banking, insurance, and securities firms is a cross-sectoral approach and not a water-tight separated regulation.

Given how difficult it is to anticipate the ways in which risks get transmitted in the financial system, it is hard to determine how to make the system more robust and how to prioritize interventions. It is probably the case that there will be a greater need for the CBN to concentrate more at protecting the basic elements of a financial system such as the: payments system, clearing and settlement, and the basic provision of liquidity while cooperating with other regulatory institutions on a cross-sectoral basis in the management of the systemic issues in the entire financial system. For this reason, much effort would have to be invested in strengthening these basic elements of the institutional infrastructure, at national, regional and international levels.

III.2 Competitive Policy

Since the beginning of globalization, competition has been an important driver of financial sector improvements. It has equally made the financial systems more open and contestable, thus, leading to greater product differentiation, lower cost of financial intermediation, more access to financial services, and enhanced stability. As globalization, technology and de-regulation further progress, the gains of competition can be expected to become even more wide-spread across and within countries. However, it is difficult to ascertain the potential gains from competition brought about by financial liberalization. Nevertheless, elements that have to be considered in analyzing competitive policy issues include the following:

First, the national as well as regional institutional arrangements for competition policy will need to change. For one, there is much more need for the ECOWAS member states to coordinate better, and preferably bring together, competition policy functions now often dispersed among various agencies within countries (e.g., separate for banking and non-bank financial institutions, or with prudential regulators, or among both specialized and general competition policy agencies). The changing nature of financial services provision also means that many other actors and aspects affect the competitive environment for financial services provision (e.g., telecommunications as it may affect the market structure for e-finance). Obviously, there is a much greater need today for international cooperation among various national agencies in the application of competition policy on regional basis. However, such related regional competition policy needs to be separated more clearly from prudential oversight of the regional central banks.

Second, the new forms of financial services provision suggests that approaches to competition issues on national and regional levels need to be adjusted. The kind of adjustments may resemble those used in other network industries, such as telecommunications, energy, and water. This would mean that the various inputs required for the production and distribution of financial services, including network services, need to be available to all interested in using them, in which they will be fairly and uniformly priced, as well as efficiently provided.

Third, in addition to corresponding changes in financial services industries, the tools for identifying and addressing competition issues need to be adjusted accordingly. As at now, the measures typically used to date for measuring lack of competition are quite limited. Yet, the more sophisticated analytical and empirical tools developed for measuring competition in other industries are hard to apply to financial services industries given the unclear production function for financial services, the tendency to produce and sell bundles of financial services, the weaker and more volatile data, the presence of network properties, etc. For example, it has been difficult to measure effectively competition in Nigerian banking industry using known tools from the traditional industrial organization. However, some information on the competitive structure may still be possible by focusing on price setting for specific products or financial functions, e.g., what are the fees being charged for consumer retail products or for processing individual payments to customers. In addition, more focus can be given to the pricing and availability of inputs necessary to produce the various financial services.

III.3 Consumer Protection

The increased diversity of financial instruments and larger number of financial institutions operating in Nigerian financial markets has led to some important questions with respect to consumers of financial services. The more diverse and complex products and the numerous changes in the markets have made it more complicated to assure that consumers benefits from this diversity. For one thing the delivery channels of the various financial products have changed quite a lot and many new players have emerged, making it harder for consumers to choose on a well-informed basis.

Though the bankers' tariff as well as other monetary policy responses by the CBN was motivated by concerns over consumer treatments in the Nigerian financial system, yet these measures are not primarily aimed at what is traditionally called **consumer protection**. Consequently, since the dividing lines between consumer protection, competition policy and assuring properly and integrally functioning

financial markets that allocate resources efficiently can be somewhat arbitrary, we divide the issues here into: ensuring markets work better for all final consumers (what is sometimes called assuring a proper business conduct); protecting individual consumers; and ensuring consumers obtain the greatest benefits from financial services provision through proper information and education.

III.3.1 Ensuring a Proper Business Conduct

The policy goal of ensuring proper business conduct is especially more applicable to capital market. Recent happenings from the global financial crisis had revealed that many changes in stock markets, banks derivatives and other formal trading markets, including ownership and governance structures, can make self-regulation to work poorer, and raise issues of oversight and conflict of interests. More generally, and also in the light of the recent lapses in governance and capital market conduct (in even the most developed countries), there has been a perception that on a systematic basis financial markets have not been functioning for the interests of all final consumers.

Following many scandals in the Nigerian capital market which affected the entire financial system, stricter accounting and auditing regulatory oversight structures that moves away sharply from self-regulation of the market by the Security and Exchange Commission (SEC) had been put in place. More generally, SEC has stepped up its oversight function to ensure, among others, fair consumer treatment. Disclosure requirements on conflict of interests and liability of all types of financial services providers have consequently increased.

III.3.2 Protecting Individual Consumers

Since the global financial crisis which equally affected the Nigerian economy in no small dimension, financial institutions in the country have had to comply with greater responsibility of truth in advertising and providing more information about their various products to consumers. Yet, the legal policy of **buyer beware** has shown to be of limited effectiveness in protecting consumers. This is because providing more information to customers is necessary but not a sufficient condition to fully answer the question of assuring that products are of fair value and match consumers' knowledge, preferences and abilities. At the same time, a more liberal environment by definition cannot have the CBN checking individual products for fair value or other consumer attributes.

Thus, it is increasingly recognized that financial services users themselves need to be equipped with the legal and administrative tools to take action against misuse of the information passed to them by the financial institutions they are dealing

with. This approach would imply, *inter alia*, that consumers can more easily sue financial intermediaries, that class-action suits are allowed, that specialized courts or institutions exist to handle small financial services claims, that more material information is provided on a routine basis, that conflict of interests are more clearly revealed, etc. In collaboration with the Nigerian judicial system, I believe we should be moving towards this direction. However, the existing judicial systems have to develop the expertise to deal with these (complex) financial cases to be effective.

III.3.3. Ensuring that Consumers Obtain the Greatest Benefits

The bewildering choices of financial instruments make it hard to compare the true all-in costs, risks and fits of an instrument with the individual consumer's needs and preferences. The less-educated in the Nigerian society patronising the financial intermediary institutions in the country may be easily misguided, and more so than in the past, about the gains of new financial instruments they are accessing in the financial markets. While consumers of financial services may have access to relevant information, they often do not read or understand the materials provided or choose to ignore it, especially when induced by the latest adverts which appear rather tempting to ignore from the financial market operators. Such mis-information and **herding effects** are becoming easier in an internet and mass-communication world of today. Because it is especially the less-educated who stand to suffer most with the increased complexity, increasing financial literacy is an obvious policy prescription for CBN to promote on this issue.

III.3.4 Evaluating the Costs of Regulation

Just as in other areas of economic activity, ensuring the right balance between the private (and public) costs and the public (and private) benefits of regulation and supervision is essential. With the many new regulations and regulatory changes in recent decades arising from global, regional or national initiatives, new costs have been imposed on financial services industries as well as the national central banks. These costs have come in the form of direct expenditures on compliance, increased reporting, further internal system development and supervisory functions, etc.

Since over-regulation can equally be counter-productive, the CBN need to avoid over- regulation and ensure that the existing regulations do not impose too high compliance costs on actors in the financial services industry. To achieve this goal, the CBN has to regularly conduct the impact assessments of any new or modified regulation as well as perform consistently rigorous costs-benefits trade-offs. Also,

the CBN can create greater consultation and transparency in their rule-making processes so as to allow a better reflection of financial services industry's views.

Such assessments and consultations should be part of the standard rule making processes not only nationally by the CBN, but increasingly regionally by relevant ECOWAS institutions. To be useful, the consultative process has to be broad enough to include all stakeholders, including consumers and businesses, not just financial institutions. This requires balancing the powers of various interest groups properly and may require proactive measures. Because, consumers in the financial markets of the Nigerian economy are typically poorly organized they may need to be equipped with resources and expertise to play their role effectively.

III.3.5 Achieving Greater Harmonization

Apart from the need to evaluate the costs and benefits of regulation, there is also need for greater harmonization of regulatory approaches across sectors and products and the elimination or reduction of barriers impeding the efficient production and provision of financial services in the Nigerian economy and in the ECOWAS region. Harmonization is needed both among financial services providers (banks, insurance companies, pension funds, asset management, etc.) and between different, but functionally equivalent types of products (whether banking, insurance, or capital markets products) in the country as well as in the region.

Harmonization across sectors and products is needed to: avoid regulatory arbitrage, provide level playing field, increase competition, and reduce differences in the overall regulatory burden of products in the country and in the regional economic integrated ECOWAS community. The increased ability to create complex financial products and unbundle risks, straddling in the process various markets and institutions, makes the need for a common regulatory approach necessary. Harmonization should be that, within markets, products are not regulated differently depending on what type of financial institution that provides the service.

Regionally and globally, harmonization issues are further compounded. This is because harmonization across markets or countries is a very complex undertaking (particularly in ECOWAS countries) because of its inconsistencies with national rules and laws of member states. In any economic integration agenda, this area (monetary integration is the highest level). For this reason, regional harmonization of financial systems in an economic community demands that the

region must have passed through free trade area (FTA), customs union (CU), common market (CM) and then economic union (EU). The passing through of these phases demands that other policy areas need to be adjusted, which takes much time and effort. The European Union (EU) and other regional experiences show not only how difficult financial harmonization is in practice, but also that conceptually difficult questions arise. For example, liquidity support and lender-of-last resort facilities in the EU are still national, but this can create inconsistencies with policies for dealing with financial insolvency as it is currently occurring in Greece and Ireland.

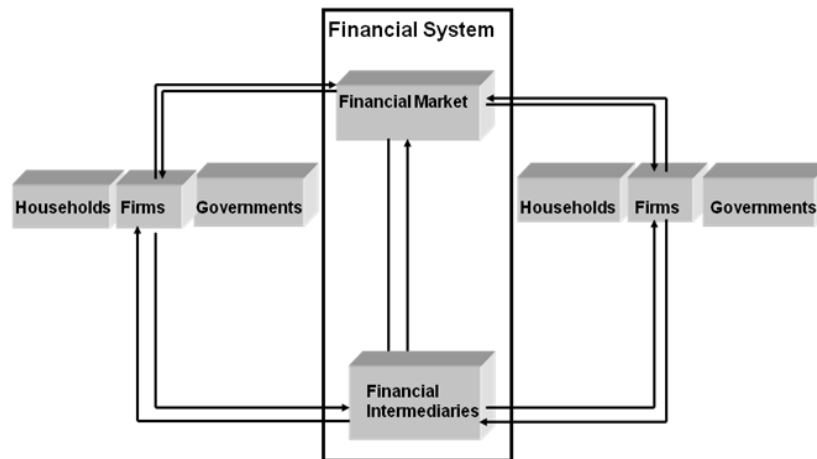
IV. Challenges Facing Nigerian Economy in its Financial Regulatory Reforms: Implications for the Real Sector

The challenges facing the CBN as well as the entire financial system arise from the global financial liberalization and efforts to insert appropriate regulatory reforms to cope at national, regional and multilateral levels. On one hand, Nigeria like other developing countries, is rapidly integrating with the global financial markets. But in the application of international regulations and best practice supervision, it is clear, however, that for most developing countries the globally common approaches may be difficult to implement without substantially injuring the real sector.

Financial system provides effective financial intermediation between the surplus and deficit units of an economy by issuing claims on borrowers directly to savers. Under a financial system, savers (or lenders) provide funds to borrowers in return for promises of repayment in addition to extra charge for using the funds at a later date. The promises of the borrowers are financial liabilities for the borrowers but assets to the savers. Financial system is comprised of: financial market, financial intermediaries and financial regulators.

IV.1 Financial Market

A financial market provides structures through which the deficit and surplus units interact and matches savers and borrowers as well as allowing them to share risks in financial intermediation – savers can diversify the risks via capital or money market instruments; financial markets allow both savers and borrowers liquidity opportunity; and financial markets provides effective communication opportunities to savers and borrowers – collect information from savers and borrowers and in return provide the information to borrowers and savers. Financial market is made up of capital and money markets.



IV.2 Financial Intermediaries

Financial intermediaries are: financial institutions (i.e. banks and non-bank financial institutions) that operates in the financial markets. They engage in trade financing by raising funds through the financial market instruments from savers and investing them in debt and equity claims of borrowers. They equally provide risk-sharing, liquidity and information services.

IV.3 Financial Regulators

Financial regulators perform three main functions: ensures all participants in the financial systems have access to essential information that the financial intermediaries give savers and borrowers, and that the information is accurate and timely; regulates the financial markets and the intermediaries to ensure financial stability of the system; and government can advance economic policy through intervention policies of the regulators into the financial system.

Perhaps, among the most important lessons learnt from the financial crisis is that the leverage and interconnectedness of firms in the financial services sector, and the critical role that financial intermediaries play in modern economies, mean that a malfunction in the financial industry can immediately and profoundly harm the entire **real sector of any economy**. For instance, crisis in the financial sector filtered through to the real economy, resulting in a reduction in access to credit, massive layoffs and higher unemployment figures, reduction in demand and consumption and a global economic recession (which are all real sector problems).

The real sector of any economy uses the financial market as the source for the required financial demand. With the liberalization of the financial sector and activities of financial regulators, the implications of these developments are transmitted to the real sector that uses the services of the financial markets. The various areas where national economies need to understand so as to evolve appropriate regulatory reforms to ensure that the real sector is not negatively affected involve the following

IV.3.1 International Financial Integration

Gross capital flows (inflows and outflows), not necessarily net flows and other forms of cross-border financial services provision such as equity listing and trading on international stock markets, have increased sharply for many developing countries in recent decades, albeit for some countries from low bases. Such flows come in the form of both **de jure** financial integration as well as from **de facto** financial integration. The former relates to government policies on capital account liberalization that permit the actual capital flow while the later relates to capital flows between countries irrespective of government liberalized or restrictive measures. In essence while the *de jure* financial integration is the 'normative' aspect of capital flows based on the capital account liberalization, *de facto* financial integration considers the 'positive' aspect of the capital flows (Aremu, 2004). The consequence rapid financial integration could force many adjustments in a short period of time on the regulatory authority. At the same time, the monetary regulatory authority may face great difficulties: while they need rapid institutional capacity building.

IV.3.2 Application and Adaptation of International Regulatory Reform Standards

It is clear that adopting international financial sector standards can be challenging for developing countries such as Nigeria. While standards need adaptation, as there is not a one-size that fits all countries, in their design, by default, standards have a bias towards the circumstances of current developed countries where these standards are fashioned. Developing countries like Nigeria are further from the paradigm reflected in these standards. Consequently, regulatory reforms based on these standards are often too sophisticated for many developing countries as they assume too much in terms of the supporting institutional infrastructure. To a large extent, overcoming or alleviating these problems requires the following actions in developing countries: better laws and regulations and institutional capacity building, supported by technical assistance, etc. This will take much time, however, and in the meantime inefficiencies from using the wrong standards may be considerable and new risks may even arise.

Trying to adopt all standards in their entirety is surely inefficient for almost all developing countries. Some parts of the financial system may not yet be developed (e.g., stock markets) and as such some standards may be meaningless when adopted; and, depending on the country, some elements of the standards will be more important than others. Better prioritization, in which elements of the regulatory reforms standards are more relevant for the circumstances of specific developing countries, and which would need to be implemented first would be useful. While it is recognized that adaptation of the application of standards and the regulatory reform model to the circumstances of developing countries can be necessary, to date developing countries have had a small stake in the global standard setting bodies and their debates. Emerging financial markets' participation in global forums like the Financial Stability Forum, Basel Committee and other such groups, is still small, making the influence of developing countries in the formulation of the various regulatory reform standards in financial intermediation still limited.

IV.3.4 Political Economy

Financial regulatory reform needs to consider the political economy of the country in questions. One clear aspect involving political economy factors is enforcement, which is an issue in many developing countries like Nigeria. Overarching concern for developing countries with respect to the financial regulatory reform standards will be their enforcement. It is important to say that the institutional constraints and limited scope for enhancing capacity are not just a matter of national laws and technical implementation, but also of enforcement. Over the years weak enforcement has been a symptom of development, and this is why some say development is all about enforcement. As such, enforcement will take some time to achieve and balancing public enforcement with other means (such as relying on private enforcement mechanisms) will be efficient. Often some of the constraints regarding enforcement run much deeper than just lack of capacity, to the lack of political will, lack of accountability, and plain corruption.

V. Regional Financial Regulatory Reforms in ECOWAS

Most discussions on financial system activities concentrate at the national level. In ECOWAS Commission, there is an on-going regional financial integration community to remove/minimize restrictions that impede the flow of capital, and harmonize all financial rules, regulations and taxes between member countries. The Commission expects two types of benefits from this initiative:

- ❖ **Economies of scale** arising in larger financial markets will generally drive a number of benefits, notably that costs should decline thereby providing scope for better consumer value. If this is associated with greater competition, sound regulation, good governance and banking consolidation and higher capital levels, then the benefits multiply; more availability of financial products and services, more consumer choice, more pressure for efficiency and effectiveness, lower prices, etc. In the ECOWAS, with a total population of around 275 million, taking cross-border barriers down is very important.
- ❖ **Cross-border financial services would also become more efficient** (faster, cheaper) in the region if there is more financial integration, since it will permit all forms of payments e.g. direct inter-bank transfers, plastic card payments, mobile banking and trade finance, and cross-border financial transactions where customers living in one country 'buy' their financial services in another country. This will particularly boost trade – a crucial dimension of the dialogue in the ECOWAS integration agenda.

V.1 Regional financial market integration

Regional financial market integration is a process leading to the removal of the relevant frictions and obstacles within an economic integrated community. In this sense, a market for a given set of financial instruments or services is fully integrated if all potential market participants bearing the same relevant characteristics such as facing a single set of rules when they decide to deal with those instruments and services, having equal access to the above mentioned set of instruments or services, and being treated equally when they are active in the market. Economists have identified three consequences of financial market integration: when financial markets are fully integrated, prices for similar assets in different regions are the same (except for trivial transactions costs); agents in different regions have access to and use financial assets from different regions to save, borrow, invest, and insure; and local saving and local investment decisions should be independent, and the capital account position should smoothly adjust to offset desired current account positions. It should be stressed that both goods and financial markets integration are necessary for full economic integration, as any desired current account position entails the simultaneous exchange of financial assets. Consequently, if local people prefer to exchange financial instruments with other local people rather than with outsiders, goods market flows will be impeded.

An integrated financial system under ECOWAS Common Investment Market (ECIM) will be of benefit to individuals and businesses by:

- providing finance for individuals, households, business and governments in any part of the community;
- helping business and households to manage their risks effectively;
- allowing the entire ECOWAS society to accumulate wealth and manage risk; and
- providing mechanisms such as payments systems through which businesses and households in the region will carry out transactions quickly, cheaply and reliably.

In addition, a well-functioning integrated regional financial market makes monetary and fiscal responses operate more effectively, helping to minimise economic and social costs when different economies in the region face shocks and ensuring that shocks to certain industries or countries can be more easily absorbed by other economies opportunities.

V.2 ECOWAS Regional Capital Market Development

ECOWAS regional capital market integration means that investors can buy and sell securities in any West African stock market without restriction. All types of participants in capital markets can offer their services throughout the region without restriction. It equally means that identical securities are traded at essentially the same price across markets after adjustment for foreign exchange. Categories of regional participants include retail and institutional investors, securities regulators, corporations and governments.

Capital market regulators within the region have signed formal Memorandum of Understanding (MOU) among themselves towards the commencement of regional capital market integration. Furthermore, the ECOWAS Commission is recognizing and collaborating with the West African Stock Exchanges Association (WASEA) and efforts are now in place to facilitate its operations. Since an integrated securities market requires an integrated regulatory and enforcement approach, increased dialogue and cooperation between member states as well as stakeholders in the regional capital markets, as provided by the Supplementary Act on Common Investment Rules, will lead to improved securities regulation and the promotion of vibrant capital markets in the region. In

this regard, harmonization of listing regulations among ECOWAS stock exchange markets is being embarked upon as an important step towards a vibrant regional capital market development

V.3 ECOWAS Regional Payments System

Untill now, ECOWAS payments system infrastructure and outreach for payment services are generally not the same across countries, further constraining systematic regional integration. Compounding the problems of the inadequate infrastructure are the numerous rules and regulations affecting both domestic and cross-border payments that are not currently harmonized and may further complicate clearing and settlement on a regional basis. Establishing a clear institutional framework for the flow of financial resources on a cross-border basis will serve as useful input in the design of an effective ECOWAS cross-border payment system. ECOWAS Commission is being assisted by the World Bank at emerging with the regional payment system.

Regional payment agreements are mechanisms designed to facilitate payments between residents of the participating countries in an economic integration arrangement like ECOWAS. Such a payment system would consist of a large central bank/interbank payment and messaging networks that offer payment services by various kinds of institutions including banks and non-bank financial institutions, as well as all interbank obligations resulting from retail payments such as checks and electronic funds transfers that are cleared on a regional/multilateral net basis by the established Automated Clearing House (ACH).

The obvious advantage of the regional payment system to ECOWAS member states is that it would reduce costs associated with regional transactions and, thus, enhancing international trade among member states if the regional payment system would provide a significant boost to trade among ECOWAS countries. This in turn would increase economic growth, and result in higher incomes and welfare for member countries.

At regional level, Accounting Bodies of West Africa (ABWA) had decided to partner with the ECOWAS Commission on harmonization of national accountancy standards of its member states in line with the ECIM initiative of the Commission. This will help put in place the necessary arrangements for the mutual recognition of certificates and credentials among ECOWAS accounting professionals. It is also to harmonize accounting qualifications and training across

the region so as to permit the flow of skilled labour among member states of the region.

VI. Conclusion

The future landscape of the ECOWAS financial system will be developed against the backdrop of an increasingly integrated regional and multilateral economic environment and within the context of the appropriateness of the national financial markets to cope. Such future lies in its ability to create a dynamic set of financial players, which are able to provide support to the domestic economy, and more importantly, that are increasingly more efficient, competitive, sound and stable to equally register its presence in the current competitive regional and multilateral environment. The task facing the monetary authorities under the new order is, therefore, to develop a more resilient, competitive and dynamic financial system with best practices, that supports and contributes positively to the growth of the economy through the economic cycle, and has a core of strong and forward-looking domestic financial institutions that are more technology-driven and ready to face the challenges of globalisation from regional and multilateral environments.

However, new issues that have arisen globally from the financial crisis include the overall approach towards ensuring a stable and efficient financial system taking into account the changing special role of banks; the approach towards competition policy; how to assure consumer protection effectively and efficiently; evaluating the costs of regulations; and the harmonization of rules across products within markets. In the application of these international and other regulatory reforms, a number of specific issues have come up for developing countries, for which the globally-developed aspects of them can be more difficult to adopt. This is the core of the challenges facing the real economy from the regulatory reforms of the financial sector.

Consequently, there have been many changes in the financial systems around the world over the past two decades. Many lessons, sometimes costly, have been learned as to what regulatory approaches work in terms of promoting sound and efficient financial intermediation. We have discovered that as the financial services industries are undergoing continuous changes in all countries of the world, new issues keep coming up. Thus, as the boundaries between financial activities get blurred, it makes sense for the boundaries between regulators to also get blurred, and eventually, for the supervision of financial services to be consolidated.

Because of the linkage effects of the financial markets to the rest of the economy, **restructuring of the financial sector is often a mirror reflection of reforms in the real sector**, including trade and parastatal reforms. Furthermore, efficient cleaning of banks' balance sheets often entails substantial reorganization of claims over the corporate sector and can prove costly to government and the public. Accordingly, while financial reforms are necessary in the country, their design and implementation has to take due cognizance of the **links with the real sector**, of their implications on borrowers' net worth and, ultimately, their effects on the portfolios of banks and the general institutional health of the financial system.

The success of financial sector reforms calls for a pragmatic approach which takes into consideration not only the current state of the financial sector, but also of the real sector. Moving too fast to improve balance sheets of financial institutions and recapitalizing banks in an environment where the main borrowers (the Government and public enterprises) are financially-distressed and the institutional capacity is weak could engender serious systematic risks to a country's financial system and vice versa.

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Stimulating Real Sector Output through Research and Development: The Nigerian Institute for Oil Palm Research (NIFOR) Experience

*Celestine E. Ikuenobe, PhD**

I. Introduction

The real sector encompassing agriculture, manufacturing, mining and oil and gas, has always been the major engine of growth of the Nigerian economy contributing significantly to employment, wealth creation and the nation's income. It is well known that before the 1970s when petroleum became the major revenue earner in Nigeria, agriculture and other sectors of the real economy provided the bulk of employment and national income in the country. The growth of the real sector over time has been driven by government policy stimulus and to some extent, by research and development support, as in the case of some agricultural commodities such as oil palm, cocoa and groundnut.

Given a fast growing population (estimated growth rate of about 3.2 per cent, CBN, 2009), the imperative for the country to create job opportunities and meet some of her food and industrial raw materials needs cannot be over-emphasized. In Nigeria, agricultural production has remained in the hands of small farmers and producers, and the nation's population has continued to be fed, clothed and provided income through activities around the sector. This underlies the importance of the sector in the nation's economy.

The major issues limiting agricultural productivity in Nigeria include low yields, due to the use of low technology inputs, poor yielding seeds and livestock, lack of or poor adoption of improved production technologies, poor infrastructure, poor access to finance and poor marketing structures. Thus, to raise productivity and stimulate the sector, these problems need to be mitigated through adequate research and provision of technologies which would lead to competitive production.

The crops for which the Nigerian Institute for Oil Palm Research has the national mandate to provide research support are oil palm, coconut, raphia palm, date palm and recently Shea. For the purpose of this paper, discussions will focus mainly on the oil palm.

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II. The Oil Palm and the Real Sector in Nigeria

The oil palm is indigenous to Nigeria and has consequently been exploited in its natural groves and homesteads in the country from time-immemorial. Fossil and linguistic evidence as well as genetic diversity strongly support contention that the crop is native to West Africa. Being the centre of origin, the oil palm has been a significant part of the economy and social life of the people of Nigeria and West Africa. It is an intricate part of the economy and life of the people of Southern Nigeria, especially in the Southeast as well as the Middle Belt of Nigeria. As a source of edible oil, it is very important to the people of Nigeria, contributing to food security, health and well-being of the citizens.

Palm oil and palm kernel were among the earliest commodities of legitimate trade after the inglorious slave trade between Nigeria and Europe. There are accounts of trading in palm oil between the people of Nigeria and merchants from Europe as early as the 15th century and, by the 19th century the international trade in palm oil had assumed great importance such that by 1830, the trade was 12,000 tonnes rising to 30,000 tonnes in the 1860s and 87,000 tonnes in 1911. In the case of palm kernels, exports were reported to have started in 1832. Palm kernel exports in 1905 was 157,000 tonnes and by 1911 it was 232,000 tonnes (Usoro, 1974; Omoti, 2009).

Although there were production and exports from some other African countries including the Congo, Cote d' Ivoire and countries of South-East Asia namely, Indonesia and Malaysia at the turn of the 20th century, Nigeria dominated the industry in terms of production and exports up to the 1960s. Nigeria's production during the late fifties and early sixties accounted for about 39.0 per cent and 40.0 per cent of world production of palm oil and palm kernel, respectively, while the export values were about 33.0 per cent and 57.0 per cent, respectively (Usoro, 1974; Omoti, 2009). All of the production at the time came mainly from the natural and semi-natural groves and from about 10,073 hectares established plantations and 4,674 hectares of small holder plantings in the country (Omoti, 2009).

The exports of palm oil and palm kernel from Nigeria in recent years, have dwindled significantly due to a number of factors including increased domestic consumption as a result of population growth, slow pace of growth of new plantings and declining exploitation, area and productivity of the groves, (Hartley, 1988; Udom 1986; Omoti, 2009).

III. Current Global Situation of the Oil Palm

The industry, which has stagnated in terms of growth and declined phenomenally in value and contribution to the GDP of Nigeria and other African producing nations since the 1970s has, however, continued to grow substantially in South East Asia.

Table 1: World production of some vegetable oils 2000 – 2008 ('000 tonnes)

Oils	2000	2001	2002	2003	2004	2005	2006	2007	2008
Palm Oil	21,867	23,984	25,409	28,259	30,987	33,846	37,142	38,674	43,118
Palm Kernel Oil	2,698	2,947	3,044	3,347	3,581	3,978	4,344	4,496	4,989
Soya bean oil	25,563	27,828	29,850	31,241	30,729	33,612	35,278	37,354	37,164
Cottonseed oil	3,850	4,052	4,221	3,987	4,367	4,978	4,903	5,043	5,029
Groundnut oil	4,539	5,141	5,178	4,508	4,706	4,506	4,382	4,194	4,445
Sunflower oil	9,745	8,200	7,610	8,917	9,423	9,785	11,191	10,843	10,687
Rapeseed oil	14,502	13,730	13,343	12,698	15,088	16,294	18,510	18,746	19,847
Corn oil	1,966	1,962	2,016	2,017	2,025	2,133	2,264	2,319	2,408
Coconut oil	3,261	3,499	3,098	3,270	3,040	3,237	3,083	3,114	3,130
Olive oil	2,540	2,761	2,773	2,904	3,110	2,965	2,798	3,020	3,081
Castor Oil	497	515	438	425	500	540	535	524	603
Sesame oil	705	747	807	810	831	868	860	831	803
Linseed oil	705	648	581	594	635	626	695	693	643

Source: Adapted from MPOB Statistics (2009)

The enterprise of oil palm is carried on at all levels from the homestead to large complex industrial scale. Arising from the versatility of the use of palm oil and the growing global demand for oils and fats and recently, biofuels, the oil palm industry has witnessed phenomenal growth in the last fifty years. With a global value of output estimated at about US\$45 billion as at 2008 (Omoti, 2009), the crop has arguably brought economic prosperity to the rural areas, where there would have otherwise been no major economic activity to benefit the generality of the people. Resulting from the substantial expansion of the industry in Indonesia

since the mid-1990s, palm oil has since 2004 overtaken soybean as the leading vegetable oil in terms of total output and trade (Table 1). The Oil World Annual Statistics and those of MPOB show that the global production of palm oil doubled in a decade from 20.625 million tonnes in 1999 to 43.118 million tonnes in 2008 (Table 1). During the same period, annual production in Indonesia tripled from 6.25 million tonnes in 1999 to 19.3 million tonnes in 2008, thus consolidating the dominance of Asia in global output (Table 2).

Table 2: Major producers of palm oil 1999-2008 ('000 tonnes)

Country	1999	2002	Mean Annual Growth per cent 1999 - 2002	2005	Mean Annual Growth per cent 2002 - 2005	2008	Average Annual per cent change 1999 - 2008
Indonesia	6,250	19,370	16.6	14,100	16.5	19,330	23.3
Malaysia	10,554	11,909	4.3	14,962	8.5	17,734	7.6
Thailand	560	600	2.4	700	5.6	1,170	12.1
Nigeria	720	775	2.6	800	1.1	860	2.2
Colombia	500	528	1.9	661	8.4	800	6.7
Ecuador	263	238	-3.2	319	11.3	415	6.4
Papua New Guinea	264	329	8.2	310	1.9	400	5.7
Cote d'Ivoire	264	205	-7.5	320	18.7	330	2.7
Others	1,250	1,455	5.5	1,674	5	2,079	7.4
Total	20,625	25,409	6.3	33,846	11.1	43,118	12.1

Source: Adapted from MPOB Statistics (2009)

Some of the reasons adduced for the stagnation or slow growth of the industry in Africa including Nigeria, are political instability and conflicts in some of the producing countries, weak and uncompetitive production systems, inadequate and inefficient processing equipment, lack of access to financing and credit for new developments in the sector, little innovation among majority of players in the industry and low rates of replacement of old plantings and dwindling productivity (Kajisa, et al, 1997; Jannot, 2003; Omoti 2004).

Unlike in South-East Asia, where the developments in the industry were driven by large scale industrial plantations with active and significant private sector participation, the development of plantations of oil palm in Nigeria has largely

been the result of various government policies and programmes co-funded or funded by multilateral agencies including the World Bank, European Union, FAO, UNDP and others (Omoti, 2009). The role of the private sector in large scale industrial plantations systems in the country has been very minimal. The lack of internal financing instruments, the withdrawal of the World Bank and other multilateral agencies from tree crop funding in Nigeria during the 1990s, the withdrawal of the Government (State and Federal) from the commodity chains and the long time (often several years) it took to implement the privatization of the State-owned companies, the lack of substantial new investments, all exacerbated the decline and stagnation of the industry in Nigeria and much of Africa (Jannot, 2003; Omoti, 2009). Growing global demand for green energy and for oils and fats, coupled with internal demands, the quest for economic growth, rural development and poverty alleviation provide opportunities for new investments and enhanced growth of the sector in Nigeria.

IV. How has Research and Development (R&D) of NIFOR Stimulated the Real Sector?

The world trade in palm oil at the turn of the 20th century and up to the Second World War, was dominated by countries of British West Africa (largely Nigeria), the Belgian Congo (later Zaire and now the Democratic Republic of Congo), and the Far-East Asia notably the Netherlands' East Indies, (Sumatra and Java) now Indonesia. At the beginning of this period, exports from the British West African Countries accounted for about two-third of the world palm oil trade. However, as a result of increased production and exports from the Netherlands' East Indies, which had at the outset adopted plantation development of oil palm on a large scale, exports from Africa began to face stiff competition. This development influenced the then colonial government of British West Africa to put in place policies and strategies to improve oil palm production and palm oil output in British West Africa (NIFOR, 2005).

At that time, the decline in palm oil exports from Nigeria was adduced to poor quality of oil produced, the absence of plantation development on any substantial scale and the use of inefficient methods. Given the contribution of palm oil and palm kernels export earnings to the national economy, it was thought that Nigeria's economy would be negatively impacted unless production methods in the country were improved upon through research. Indeed, those concerns are still valid today. Arising from the various agricultural conferences in West Africa between 1927 – 1930, was the recommendation that research should be undertaken by local Departments of Agriculture with a view to improving the oil palm industry in the various territories. This recommendation

led to the establishment of the Oil Palm Research Station (OPRS) in 1939, which later metamorphosed into the Nigerian Institute for Oil Palm Research (NIFOR). Research at NIFOR is driven by:

- the needs of the industry and the national policy on agriculture
- the need to advance knowledge that enhances sustainable production of its mandate crops.
- need for improvement on the genetic potentials of the mandate crops of the Institute
- strategic research priorities seeking innovative ways of overcoming the many technical constraints to production
- need for value-addition to products of these crops
- significant cognizance of the production systems with the smallholder operator in focus.
- principles and criteria of the Roundtable on Sustainable Palm Oil (RSPO)
- emerging issues, e.g. climate change

Innovation is a key element in the sustainability of any industry. It is carried out through generation of processes and services that are nurtured by competitive production leading to high-value products. Innovation is driven and reinforced by research and development. Globally, palm oil business is today a multi-billion dollar industry. The industry worldwide, has benefitted immensely from the outcomes of research and development activities and technological advances through improvements in fresh fruit bunch and oil yields per unit area, reduced inputs, leading to and maximization of oil production from a smaller land area than would otherwise have been (Basiron, 2007).

As an outcome of research and development in major oil palm research centres and laboratories, palm oil is now a major source of sustainable and renewable raw material for the world's food industry (with palm oil being an ingredient in one of every ten food products), oleochemical and biofuel industries. Research and development strategies, coupled with the right policy mix, have greatly impacted and driven the industry through the application of good and appropriate science and technology (Basiron, 2007). The phenomenal growth of the global area under the crop during the last fifty years and output from 1.5 million tonnes in 1961 to about 40 million tonnes in 2009 has largely been facilitated by outcomes of research and development. The industry has also grown from its simple upstream scale of plantations to downstream production including refineries, oleochemical and bio-diesel plants, spawning other service industries such as mill fabrication and manufacturing and ancillary services and

providing employment for arrays of personnel ranging from the simple plantation labour, to world class engineers and scientists.

IV.1 Oil Palm Genetic Improvement

As noted by Hartley (1988), Corley and Tinker (2003), Basiron (2007), progress in breeding to enhance yields has greatly contributed to the viability of oil palm cultivation and ensured that it continues to improve, and such progress has stimulated expansion of cultivation.

According to the genetic principle of fruit character inheritance of the oil palm that was earlier elucidated by Beirnaert and Vanderweyen (1941), oil palm cultivation depended mainly on the *dura* fruit form, which was less productive of palm oil than the *tenera* variety. Since the Beirnaert and Vanderweyen's theory of inheritance of fruit character of the oil palm, various studies in major oil palm research centres have been undertaken to produce high yielding oil palm hybrid varieties with high oil yield, high oil extraction rates (OER) and high iodine value. The outcome of research at the NIFOR (e.g. Broekmans, 1957a, 1957b; Hartley, 1957; Blaak, et al. 1963; Sparnaaij, et al. 1963) have greatly contributed to procedures adopted worldwide for oil palm genetic improvement.

Research work at the NIFOR led to the demonstration of the value of *dura* x *pisifera* cross, which give a progeny, consisting exclusively of the desired *tenera* (thin-shelled) hybrid variety, which has since become the variety of choice in commercial cultivation of the crop. This has become the basis of controlled pollination and production of hybrid *tenera* oil palm seeds all over the world. The outcome of early research efforts at the NIFOR in the search for high yielding oil palm, was the release of the D x P *tenera* hybrid Extension Work Seed (EWS) by NIFOR in the 1950s, whose yield was more than five-folds that of the unimproved grove palms. This became the basis of the present breeding programmes initiated about 1957 – 1959 following the modified reciprocal recurrent selection method.

NIFOR's breeding programme overtime has significantly improved the fresh fruit bunch and oil yield of the oil palm (Okwuagwu, et al. 2005) as shown in Table 3. Even though the crop is indigenous to West Africa, but because of less the favourable climatic conditions of drought periods, higher soil moisture deficits and lower sunshine hours, especially during the rainy seasons in West Africa, yields are generally higher in South East Asia. Therefore, continuous efforts are being undertaken to improve the yield through breeding to overcome the climatic limitations to achieving genetic yield potentials of the crop. Within the climatic

limitations of Nigeria, NIFOR's breeding programme has led to the development of high yielding, early maturing, disease resistant/*Fusarium* tolerant hybrid oil palm variety (the *tenera* hybrid) which yields 15 - 25 tonnes fresh fruit bunch (FFB) and 3-5 tonnes of palm oil as against 3 - 5 tonnes FFB or 0.5 tonnes palm oil per hectare of unimproved palms in the natural groves, representing five-fold increase. These materials also come into fruiting two and half years after planting as against seven years for the unimproved palms. Some estates in Nigeria already record yields of 19 – 25 tonnes per hectare in mature plantings of these materials. From selections among materials in the second breeding cycle, superior materials yielding 20-25 tonnes FFB per hectare per year under the soil moisture deficit and low sunshine hours limiting regimes of the oil palm belt of Nigeria have been identified (Okwuagwu, et al. 2005) and have been introduced into the seed gardens from which planting materials are produced for farmers.

Breeding the oil palm for resistance to the devastating *Fusarium* wilt disease has been high on NIFOR's research agenda (Okwuagwu, et al. 2005). Arising from the breeding programmes and the procedures for screening materials against the devastating *Fusarium* wilt, it has become possible to undertake re-planting of oil palm in locations where high infestation of the disease would otherwise have occurred (Cochard, et al. 2005). Cochard, et al. (2005) noted that as a result of breeding for resistance to *Fusarium* wilt, it has become possible to grow and sustain the oil palm in several locations in West Africa where the disease is a problem.

Large-scale germination of the oil palm seed used to be difficult and unpredictable, until research at NIFOR elucidated techniques for breaking the natural dormancy of oil palm seeds. This has led to development of techniques for large-scale seed production, which ensures early, uniform and high percentage (up to 90.0 per cent) germination. Globally, elite *tenera* hybrid seeds and seedlings of oil palm are now produced in large quantities using this technique for distribution to farmers. NIFOR produces over 8 million sprouted seeds annually and supplied about 26 million sprouted improved oil palm seeds to farmers in Nigeria between 1999 and 2008, based on demand.

Table 3: Quality Attributes of Oil Palm Planting Materials and Performance of Improved Materials in Farmers Fields under Improved Management Practices

Attributes	Un-improved Farmers Materials	NIFOR tenera hybrid	Performance of the NIFOR tenera under Farmers Field
Maturity/time of first fruiting (years)	5 - 7	2 ¹ / ₂	2 ¹ / ₂
Yield (FFB) tonnes ha ⁻¹ year ⁻¹	3 - 5	15 - 25	15 - 25
Oil yield tonnes ha ⁻¹	0.5	3 - 3.5	3 - 3.5
<i>Fusarium</i> wilt resistance	No	Yes	Yes

Source: NIFOR

IV.2 Crop Management Practices

Other than breeding for high and improved yields, NIFOR's research efforts have provided agronomic packages, which assure sustained and optimum productivity of oil palm, at all stages of its life cycle, and environmental protection and sustainability. In general, the agronomic, soil fertility management and crop protection practices adopted in the cultivation of oil palm in Nigeria and elsewhere, are based on recommendations from the output of research in NIFOR. This has guaranteed good and sustainable yields under the limitations of the climatic and soil conditions of Nigeria.

IV.3 Small and Medium Scale Processing

The oil palm enterprise in Nigeria is widely carried on by homestead and small producers who contribute over 80.0 per cent of national palm oil and palm kernel output. The processing techniques adopted by this group of producers are very inefficient, resulting in 20 - 50 per cent losses of potential palm oil production. Therefore, the adoption of improved processing techniques can dramatically impact on national palm oil output. In recognition of the dominance of this group of producers, improving the methods of palm oil production at the small and medium scale has been high on the research agenda at NIFOR. Research output in this direction, which began since 1959, when the Stork Hydraulic and Press was first developed and tested at the then WAIFOR (now NIFOR) and incorporated into the Pioneer Mills, has deepened, as NIFOR has over the time developed appropriate and efficient small-scale milling equipment. Arising from the efforts of the ground work of the collaboration that began in 1974 with the United Nations Development Programme (UNDP), the Institute designed and fabricated an integrated small-scale processing equipment (SSPE) comprising

- (i) Sterilizer/cooker
- (ii) Rotary stripper
- (iii) Horizontal digester
- (iv) Hydraulic hand press and
- (v) Clarifier

Consolidating on this groundwork, further research in the Institute has led to improvements to the equipment and the hydraulic hand press has been replaced with a digester screw press. The SSPE is now available in three categories ranging in capacity from 0.5 to 1.5 tonnes FFB per hour. The Institute has also designed and fabricates palm kernel recovery units.

IV.4 Other Technologies Developed and Promoted

Various technologies to address aspects of value-addition and utilization of the enormous biomass resulting from oil palm production and palm oil processing, have been developed and promoted by the Institute. While these technologies have in no small measure enhanced the productivity and profitability of the sector, their adoption rates have, however, been low (Table 4). This is largely attributed to the weak nature of the dominant small scale production system of the oil palm industry in Nigeria, the weak extension linkages and inadequate access to investment funds.

Table 4: Some Technologies Developed and Promoted by NIFOR

Technology	Incremental value	Adoption	Challenges
NIFOR SSPE	Improved extraction of palm oil, 18.0 per cent extraction against 10.0 per cent by traditional methods, lower FFA, higher palm oil quality, reduced drudgery	Widely copied. NIFOR fabricated SSPE contributed 20.0 per cent to total national milling capacity in 10 years in a 2005 survey	Weak extension linkages, cost of SSPE, cost of inputs, ethics of local fabricators
Kernel recovery units	Higher kernel recovery	Low	Weak extension linkages, cost.
Banga sauce	Commercial canned product, higher income, preservation, longer shelf life	Low	Weak extension linkages and high initial investment cost. Need to scale down scope of technology
Bottled palm sap (palm wine)	100per cent product integrity, prolonged shelf life of palm sap, added value	Low	Weak extension linkages and high initial investment cost
Bio-diesel from palm and palm kernel oil	High, green energy	Low	High investment cost, competition from edible and other industrial uses of palm oil
Briquette from wastes (Fuel)	Higher income, waste utilization, environmental sanitation	Low	Weak extension linkages, cost
Utilization of POME for livestock feed	Higher income, waste utilization, environmental sanitation, alternative source of energy in livestock feed	Low	Weak extension linkages, cost. Competition from other sources of livestock feeds
Composting of empty bunch refuse for organic fertilizer	Higher income, waste utilization, environmental sanitation	Low	Weak extension linkages

Source: NIFOR

V. Roundtable on Sustainable Palm Oil (RSPO) and Stimulating Oil Palm Sector in Nigeria

There has been growing global environmental concerns and negative campaigns about the environmental implications of continued expansion of the oil palm industry. Some of these campaigns, genuine as they may sometime seem, are largely driven by competitors producing other oils and are sometimes overhyped. In response to these concerns and campaigns, the RSPO seeks to promote the growth and use of sustainable palm oil through cooperation and stakeholders in the oil palm production and supply-value chain (RSPO, 2007). The RSPO is a global, multi-stakeholder initiative on sustainable palm oil. Members of RSPO and participants in its activities are drawn from different backgrounds, including plantation companies, manufacturers and retailers of palm oil products, environmental NGOs and social NGOs and from many countries that produce or use palm oil (RSPO, 2007). Recognizing that sustainable palm oil production can only be achieved within the framework of legal, economically viable, environmentally appropriate and socially beneficial management and operations, the RSPO has defined a set of principles and criteria for sustainable palm oil production. Some of these issues have before the institution of the RSPO, driven and will drive the direction of research at NIFOR.

VI. The Future

Palm oil will remain a leading vegetable oil in the world, as its versatility of use becomes unfolded with evolving knowledge, science and technology. With increasing population, demand for bio-diesel and other uses, global demand for palm oil will continue to increase in the face of increasing land shortages in South East Asia which presently account for about 90.0 per cent of global palm oil production and export. Increasing environmental campaign pressures including global issues of High Conservation Value Forests (HCVF) and land shortages could change the course of expansion of plantings in South East Asia. These issues mean that Africa and Nigeria, in particular, will inevitably become the hub for new developments of the industry to meet rising global demands for palm and palm kernel oil.

Challenging as these opportunities seem for expansion of production of the crop in Nigeria, future growth of the oil palm industry in the country, based on industrial estate models, could be hampered with the present land tenure system. Therefore, future growth will be based on improvement and integration of small holder production systems with the large scale industrial model. Currently, the productivity of the small-scale production system falls far short of the global benchmarks. Consequently, improvement on the current low productivity of the

small-scale producers can in the short-term significantly improve the national palm and palm kernel output and supply. In the long run, to be locally and globally competitive, producers must deploy cutting edge technologies starting from using improved planting materials. The sector will require some regulation in its operation including sourcing planting materials, production and marketing in order to ensure that producers adopt competitive and global best practices.

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Microcredit Financing by Deposit Money Banks/Microfinance Banks and the Agricultural Sector Development in Nigeria

*Joe Alegieuno**

I. Introduction

The formulation and implementation of strategies for accelerating the pace of growth and sustained economic development has continued to occupy the political and reforms agenda of developing countries such as Nigeria. An essential component of this endeavour is the need to properly identify development priorities, the financing gaps and measures to address them.

In Nigeria, the agricultural sector remains the mainstay of the economy and occupies a central place in the country's economic growth programmes and initiatives. This derives from the fact that the sector employs the bulk of the population and would continue to provide sustenance to millions of people. Additional factors that would continue to favour increased attention from promoters of growth and development in the sector include the large landmass, favourable climatic and edaphic conditions.

Majority of the farming population are small-holders accounting for about 90 per cent of the farmers in the country. This category is severely faced with lack of financing for productive and practical engagement in commercial farming, a situation that has relegated them to low productivity, low income, low investment and endemic vicious cycle of poverty. Bridging the financing gap for small-holder farmers in the country has been a major concern to the government and, indeed, the Central Bank of Nigeria, as the apex financial authority. The Bank, in collaboration with government has, therefore, over the years, enunciated programmes and policies that provide microcredit for the small-holder farmers in the country.

This paper examines microcredit financing programmes by the deposit money banks and the microfinance banks, and how this has impacted on agricultural development in Nigeria. Following the introductory section, section two highlights the importance of micro credit in agricultural development. Section three highlights the financing gap in the agricultural sector and the measures that have been put in place to encourage deposit money banks and microfinance banks

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to lend to the sector by the Central Bank of Nigeria. Section four summarizes the challenges faced by deposit money banks and microfinance banks in the delivery of their micro credit programmes, while section five highlights suggested strategies for improving micro credit delivery by deposit money banks and microfinance banks. The paper is concluded in section six.

II. Importance of Micro Credit in Agricultural Development

Agriculture provides occupation and employment to the majority of the population in Nigeria. In 2008, it contributed about 42.0 per cent to GDP and accounted for 58.3 per cent of total non-oil export earnings. To a large extent, the sector remains rudimentary and underdeveloped owing to the inability of promoters to procure modern equipment and adopt improved cultural practices. One of the major constraints to the growth and development of the sector is, thus, lack of adequate capital. "Inadequate capital distorts and hinders the path to long-term growth and development through low investment, capacity underutilization, and a reduction in productivity and a lower growth rate (Ochi, 2007)". Owing to the subsistence nature of production, Nigerian farmers who are mainly poor can, therefore, hardly save. Such a situation underscores the importance of external credit as part of the strategies to support expansion of the scope and scale of their operations.

According to Adam Smith "the number of useful and productive labour, it will hereafter appear, is everywhere in proportion to the quantity of capital stock employed". This means that the number of useful and productive workers as well as their productivity depends on the stock of capital. An increase in capital to the agricultural sector would raise the productivity of labour as it enhances division of labour and by implication, generate more employment.

The above position was further supported by Vaish (...) who explained that employment rate and output growth depends largely on the rate at which the economy's total resources, particularly its stock of capital can grow and the rate at which this capital stock grows per period of time depends on the proportion of the period's total output that is devoted to investment. According to Adera (1995), the rules and regulations of the formal financial institutions have tagged poor small-holders as unbankable. Braveerman and Guasch (1986) stated that despite efforts to overcome the widespread lack of financial services amongst small-holders in developing countries and expand credit in the rural areas of these countries, only the majority still has limited access to bank services to support their private initiatives. ROK (1994), opined that improving the availability of credit facilities to the agricultural sector is one of the incentives that have been

proposed for stimulating its growth and the realization of its potential contribution to the economy.

Micro credit helps to modernize production in agriculture and place farmers in a proper position to employ mechanized equipment that can lead to increased agricultural productivity. Increased credit could accelerate rural development, reduce income disparities and create income increases that would improve welfare.

Credit is defined as the receipt of cash, goods and services now, with a promise to pay back in the future. It can also be defined as any form of arrangement by which an individual obtains money, goods and services and agree to pay back at a later date. Credit is particularly important to the small farmers that constitute the largest segment of the farming population as they have been priced out of the credit market due to various problems. The problems include fragmented holdings/little potentials for expansion, cashflow problems arising from the deficits inherent in the production cycles, limited networks, inability to produce the traditionally-favoured securities viz: mortgages, land, sterling shares and some other "gilt-edges" to back up their credits proposals and limited debt capacity.

CeRAM (2007) stated that credit is one of the essential prerequisites for agricultural development. Money is needed to employ labour as well as for consumption for household members. In addition, it is required for improvement in farming technique, such as the use of fertilizers and pesticides, farm supply, storage, marketing and processing. CeRAM (2007) further categorized credit into three types namely, short-term credit to finance the current cropping seasons operation, seeds, fertilizers and farm family expenses until the crop is sold; medium-term loans (longer than one crop year and less than 3 years) which is needed for the purchase of breeding stock and equipment; and long-term credit needed to purchase machines and embark on major improvements of farmland and buildings.

III. The Financing Gap in the Agricultural Sector and Measures Put in Place to Address Them

III.1 Financing Gap in the Agricultural Sector

Agriculture remains a major contributor to the gross domestic product (GDP), accounting for 39.5 - 42.1 per cent of total GDP for the period 2004 - 2008, (see table 1). However, the sector is disadvantaged in terms of allocation of credit by banks and financial institutions, a situation which affects its economic potentials. Credit to agriculture has exhibited a high degree of volatility over the years. It declined from ₦67.74 billion in 2004 to ₦49.39 billion in 2006, surged to ₦149.57

billion in 2007, declined again to ₦106.35 billion in 2008 and was ₦135.7 billion in 2009 (Table 2).

Table 1: Contribution of Agriculture to GDP at 1990 Constant Basis Prices (Naira Billion)

Sector	2004	2005	2006	2007	2008
Agriculture	216.21	231.48	248.9	266.48	283.91
Industry	156.49	159.16	155.77	151.7	148.39
Building and construction	7.62	8.54	9.65	10.91	12.34
Wholesale and retail trade	68.08	77.28	89.33	102.62	113.26
Services	79.18	88.48	93.33	102.53	113.26
Total	527.58	561.93	595.82	674.24	674.58
Share of Agric. in total (%)	41.0	41.2	41.8	39.5	42.1

Source: Central Bank of Nigeria Annual Report, 2009

Table 2: Sectoral Distribution of Commercial Bank Loans and Advances (Naira Billion)

	2004	2005	2006	2007	2008	2009
Agriculture/forestry and fishing	67.74	48.56	49.39	149.57	106.35	135.7
Manufacturing	332.11	352.04	445.8	487.58	932.8	993.46
Mining and Quarrying	131.06	172.53	251.48	490.71	846.94	1,190.73
Real estate and construction	-	-	-	-	466.8	778.14
Commerce exports	31.35	26.43	52.69	66.55	75.2	45.87
Imports	-	-	-	-	144.88	1,199.21
Service/public utility	-	-	-	-	45.85	74.78
Transport and communication	-	-	-	-	1,304.45	776.58
Financial institution	-	-	-	-	714.47	352.2
Other government miscellaneous	956.99	77.15	1,724.95	3619.07	2,622.12	2,890.61
Total	1519.25	676.71	2524.31	4813.48	7259.86	8437.28
Share of Agric. in total (%)	4.5	7.2	2.0	3.1	1.5	1.6

Source: Central Bank of Nigeria Annual Report, (Various Issues)

This trend reveals some elements of uncertainty. Furthermore, the proportion of credit to the sector for the years 2004 - 2009 (see table 2), which averaged 3.0 per cent, reflected the credit gap experienced in those years. Another indication of the financing gap is in terms of value of stocks of agricultural companies listed on the Nigerian Stock Exchange. At 1984=100, the percentage of the value index of stock of the agricultural companies averaged 0.4 per cent (see Table 3) for the period 2004 - 2008. This development is largely due to the fact that most agricultural projects are relatively small to be competitively quoted on the stock exchange.

Table 3: Value Index of All Common Stocks Listed on the Nigerian Stock Exchange (1984=100) 2004-2008

Sector	2004	2005	2006	2007	2008
Agriculture	120.80	112.10	125.30	176.20	153.80
Financial	8,673.70	11,932.40	17,258.80	38,421.60	18,441.30
Manufacturing	9,811.90	8,148.20	9,319.70	11,825.40	6,071.30
Commercials	4,933.70	3,598.80	4,807.70	4,776.50	4,006.30
Services	304.40	294.40	1,677.90	2,790.60	2,900.80
Miscellaneous	23,844.50	-	33,189.30	57,99.20	31,450.80
Total	49,693.00	26,090.90	68,384.70	57,997.30	65,032.30
Share of Agric. in total (%)	0.24	0.43	0.18	0.29	0.24

Source: Nigerian Stock Exchange Report, 2009

The microfinance banks have not been performing any better as an insignificant percentage of their lending goes to the agricultural sector. For instance, the average percentage of loans to agriculture and forestry by the microfinance banks for the period 2004 - 2008 was 4.4 per cent (see Table 4).

Table 4: Sectoral Distribution of MFB Loans and Advances 2004-2008 (Naira Million)

	2,004	2,005	2,006	2007 *	2,008
Agricultural/forestry	483.10	49.90	956.10	-	3,534.30
Mining/Quarrying	510.60	14.70	405.00	-	412.40
	331.80	64.90	1,088.70	-	2,006.30
Real Estate and Construction	279.20	214.80	839.80	-	2,139.20
Commerce	2,875.30	1,591.90	4,504.00	-	21,313.20
Transport and Communication	1,088.10	2,795.10	2,087.40	-	2,649.20
Others	5,785.60	23,753.40	6,608.50	-	16,054.90
Total	13,357.70	30,489.70	18,495.50	-	50,117.50
Share of Agric. in total (%)	3.6	0.2	5.2		7.1

Source: Development Finance Department, Central Bank of Nigeria

Note: *Figures include those of community banks as they existed for that year*

The above situation has arisen owing to the fact that:

- Agriculture is predominated by small holdings with adverse technical and market economies of scale;
- Small holder farmers do not have acceptable collateral to present for loans from banks;
- There are no records and data on the basis of which banks can effectively access the credit worthiness of farmers;
- Farmers are unable to present bankable proposals for bank lending; and
- Many farmers are not aware of the credit opportunities in financial institution.

III.2 Measures Undertaken by the Central Bank of Nigeria to Improve Lending to Agricultural Sector

The Central Bank of Nigeria has taken steps over the years to address the challenge of lack of access of farmers to financial services. These include the setting up of the Agricultural Credit Guarantee Scheme Fund (ACGSF), established by Decree 20 of 1977 to:

- provide guarantee for loans granted by banks for agricultural production and agro-allied processing;
- accelerate the flow of institutional credit to small-scale farmers;
- inculcate banking habit amongst farmers, thereby encouraging savings mobilization;
- aid banks to aggressively support agriculture by reducing their lending risks;
- make farmers patronize formal credit markets and prevent rural borrowers from the exploitative charges of the informal credit market;
- ensure that adequate funds are provided to the agricultural sector on reasonable terms from the mainstream financial system; and
- facilitate the flow of capital to farmers to enable them adopt new technologies and farm practices which would improve productivity and income.

As at December 2009, a total of 647,358 loans valued at ₦34.41 billion were guaranteed under the scheme, out of which 442,726 valued at ₦18.20 billion, representing 68.4 per cent and 52.9 per cent, respectively had been repaid.

The ACGSF was primarily to provide micro-credit to the Nigerian small-holder farmers. Out of the total loans guaranteed under the scheme as at December 2009; 575,816 amounting to ₦14.77 billion, representing 89 per cent and 43 per cent by number and value, respectively were loans of ₦100,000 and below (see table 5), showing that the scheme has largely catered for small-holder farmers since inception. This translated to 18,574 in number and ₦0.48 billion in value per annum for the 31 years that the scheme had existed. This performance is below the credit demand of the entire Nigerian farming population.

Table 5: Categorization of ACGSF Loans by Size: 1978 to 2009

Loan Category	Number	Value	% No	% Value
> ₦ 5,000.00	226,277	0.75	0.35	0.02
₦ 5,001.00- ₦ 20,000.00	123,197	1.82	0.19	0.05
₦ 20,001.00- ₦ 50,000.00	144,315	5.6	0.22	0.16
₦ 50,001.00- ₦ 100,000.00	82,027	6.6	0.13	0.19
Above ₦ 100,000.00	71,535	19.44	0.11	0.57
Total	647,351	34.21	1	1

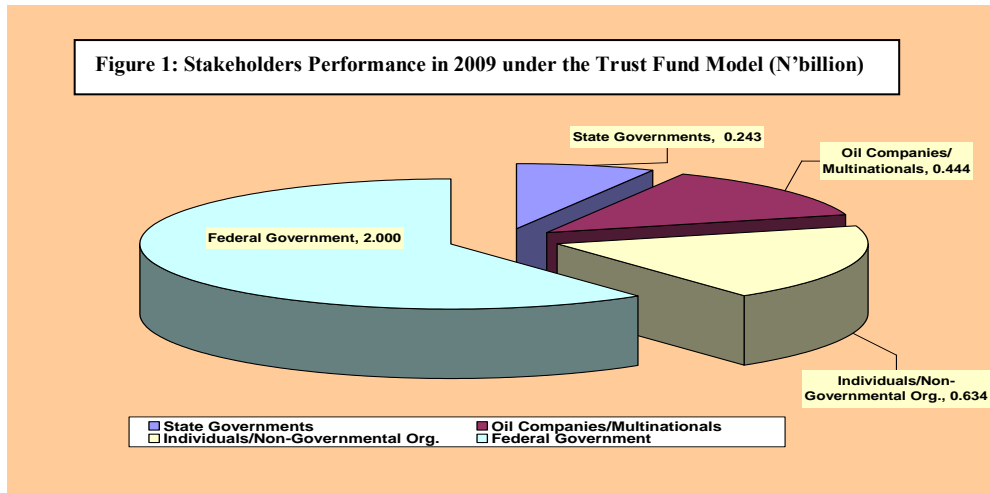
Source: Development Finance Department, Central Bank of Nigeria

In order to improve the performance of the ACGSF, the Central Bank of Nigeria has over the years, undertaken ancillary steps. One of such is the introduction of the Trust Fund Model, which provides opportunities for third parties such as state governments, companies, religious organisations, philanthropists and others to deposit funds in banks as lien to encourage them to lend to identified groups. From 1992 when the model was established to December 2009, a total of ~~₦~~5.5 billion had been pledged by 55 third parties to support lending to their beneficiaries.

Table 6: Funds Placement under the Trust Fund Model, December 31, 2009

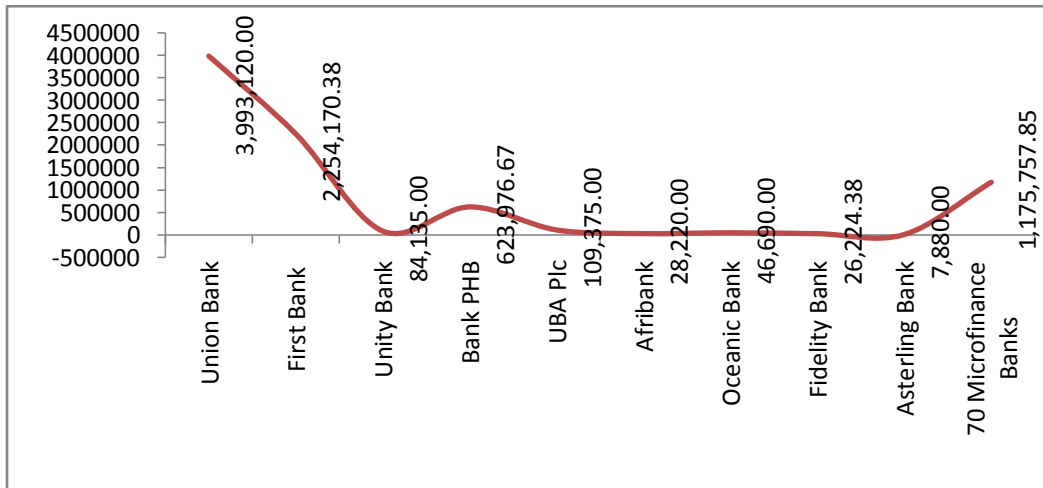
S/No	Name Of Stakeholder	Amount Placed (N'm)	Number
A.	Multinationals/Oil Companies	₦ 444.00	4 Multinationals
B.	State Governments/LGAs/Ministries	₦ 2,429.35	17 States/ 17lgas/3 Govt Ministries
C	Federal Govt. Organization	₦ 2,000.00	1
D.	Individuals/Organizations	₦ 633.75	13 Indv/Org
	Grand Total Trust Fund Placement	₦ 5,507.10	55 Stakeholders

Source: Development Finance Department, Central Bank of Nigeria



The Interest Drawback Programme (IDP) was also introduced in 2003 to encourage loan repayment by borrowers under the ACGSF. The programme, which is funded by the Federal Government and the Central Bank of Nigeria, currently has a capital base of ₦2 billion. Farmers who repay their ACGSF loans on time are refunded 40.0 per cent of the interest paid. This has positively impacted on loan repayment by borrowers over the years. From 2004 to 2009, a total of 15,545 farmers received the sum of ₦111.57 million as interest under the ACGSF.

The introduction of microfinance banking is yet another dimension to small-holders lending in Nigeria and the Central Bank guarantees loans granted by the MFBs to the agricultural sector. It is expected that all loans granted by the MFBs would be small scale. The performance of the MFBs has, however, not been significant in comparative terms, owing partly to lack of funds and partly to lack of skill in small-holders lending. For instance, in 2009, 70 MFBs granted a total of ₦1.2 billion (14.4 per cent) of the ₦8.35 billion guaranteed for that year (see Figure 2 below). In 2010, the MFBs accounted for only 6,901 loans valued ₦0.59 billion out of 40,944 loans valued ₦6.13 billion, representing 16.9 per cent by number and 9.6 per cent by value of loans guaranteed under the ACGSF for the period January to October, 2010.

Figure 2: Performance of Deposit Money Banks (DMBs) and Microfinance Banks under the ACGS IN 2009

Another major intervention in agricultural financing is the Agricultural Credit Support Scheme (ACSS), introduced in 2006 through the joint initiative of the Federal Government and the Central Bank of Nigeria with the active support and participation of the Bankers' Committee. ACSS funds are disbursed to farmers and agro-allied entrepreneurs at a single-digit interest rate of 8.0 per cent. At the commencement of the project support, banks will grant loans to qualified applicants at 14.0 per cent interest rate. Applicants who pay back their facilities on schedule enjoy a rebate of 6.0 per cent, thus reducing the effective rate of interest to be paid by farmers to the 8.0 per cent. As at December 2009, a total of 1,258 applications valued ₦28.2 billion were received by banks under the ACSS, out of which 126 projects valued ₦23.3 billion were approved. In terms of actual disbursements, a total of forty-seven (47) projects valued ₦17.1 billion was recorded as at the end of December, 2009.

In 2009, the Central Bank of Nigeria in collaboration with the Federal Ministry of Agriculture and Water Resources (FMA&WR), established the Commercial Agriculture Credit Scheme (CACs) to promote commercial agricultural enterprises in Nigeria. The Scheme is funded through the issuance of ₦200.0 billion FGN Bond floated by the Debt Management Office (DMO). Under the Scheme, State Governments could borrow from the ₦200.0 billion to either engage in direct agricultural programmes or on-lend to small-holder groups. Under the CACS, the thirteen (11) under-listed State Governments have each accessed ₦11.0 billion for on-lending to co-operative farmers and unions in their various

states: Data is, however, not yet available as to how much of the fund has gone to the farmers.

Financing Bank	States Financed	Amount (N'b)
United Bank For Africa Plc	Bauchi, Kogi, Nasarawa, Ondo and Zamfara	5.0
Union Bank Plc	Gombe, Niger and Kwara States	N3.0
Zenith Bank Plc	Adamawa, Kebbi and Taraba State	N3.0

Source: Development Finance Department, Central Bank of Nigeria

IV. Challenges Faced by Deposit Money Banks and Microfinance Banks in the Delivery of Micro Credit Programmes

The inability of deposit money banks and microfinance banks to meet the credit needs of small holders has been occasioned by challenges faced by the lending institutions and the borrowers.

Most of the lending institutions are yet to accept agricultural lending as a profitable business. While they venture into lending to other equally risky sectors, agricultural activities have always been tagged as fraught with uncertainties of weather, natural hazards, and possible attack from pest and diseases. This is further compounded by the dearth of skills in agricultural credit appraisal, monitoring and administration in most of the banks. The credit officers of the banks are traditionally accustomed to lending to commerce, trading, services and industrial, oil and gas sectors. In most of the institutions, there are no specialized departments or agricultural experts to take charge of agricultural loan portfolios, while at the same time, there are no special trainings on agricultural lending to update staff on the technicalities involved. Another major challenge faced by the banks is the lack of rural branches, a situation which impedes outreach to widely-dispersed customers.

IV.2 Borrowers-Related Challenges

Aside from the challenges faced by lenders, the borrowers are also faced with several constraints. First, their small-holdings and scattered nature presents technical and market diseconomies, as it require huge costs of loan administration. Also important, is the fact that many farm holdings operate under diverse cultural and agronomic practices, and this creates huge extension challenges which loan officers are ill-equipped to address.

Second, most of the farming population lacks the understanding and the competence/ appreciation of the importance of keeping farm records. This makes it difficult for them to take appropriate economic decisions and, thus, constitute serious hurdles to loan officers in assessing their credit worthiness and risks.

Third, the subsistence nature of farming hampers savings, investment and asset accumulation. The farmers can scarcely afford to provide tangible security, as a requirement for lending from banks. The communal land tenure system with shared land rights/ownership adversely affects the acceptability of land as alternative security. In rural areas and villages, land values are abysmally low and might not offer easy foreclosure processes.

Finally, the lack of good cultural and agronomic practices, coupled with ineffective extension machinery, predispose borrowers to inefficiencies that affect productivity, storage and, thus, occasion defaults amongst them.

V. Suggested Strategies for Addressing the Challenges Faced by Banks in Micro Credit Programmes

Addressing the challenges would go a long way to removing the bottlenecks on the part of lenders and borrowers. This paper posits that, for increased agricultural production in Nigeria to be achieved in order to meet the needs of the populace, guarantee food security, reduce local imports and promote non-oil exports, there would be need for innovative policy changes on various fronts:

- **Financial Literacy**

Field experience reveals that the poor farmers lack basic knowledge with regards to finance/financial services. An average farmer does not know how to keep records, manage credit, savings and other financial opportunities. There is need to provide specially crafted educational programmes which can develop their capacity in record-keeping, simple farm management principles, loan usage and repayment.

- **Creation of Well-Equipped Agricultural Finance Departments in Lending Banks**

Lending banks need to have full-fledged agricultural finance departments manned by staff with training in relevant fields. Agricultural economists, rural sociologists, agricultural extension specialists, economists and business management specialists would be handy for such specialized agricultural finance department. Agricultural experts are more likely to understand the dynamics of

agricultural production, adopt appropriate risk mitigation strategies, loan monitoring and recovery procedures than non-experts.

There should be training and capacity building through classroom and attachment programmes for loan officers of banks. A loan officer should be able to understand the peculiarity of agricultural production, properly assess agricultural loan proposals and effectively determine the credit worthiness of borrowers using techniques that are applicable to the sector. Training should be a continuous exercise and this would enable them to disburse loans at appropriate times, monitor loan utilization and give simple advice during their interactive visits with borrowers.

- **Agricultural Credit Fund/incentives**

Special wholesale funding arrangements should be put in place from which agricultural lenders; particularly microfinance banks could draw resources for on-lending to farmers. Some eligibility criteria should be set for deciding the institutions that would access these funds. These would include proven record of previous channeling of certain portion of their portfolio to performing agricultural/agro allied activities, and that such credit disbursement would be structured to meet the production cycle of the farmers. Such proviso will encourage the microfinance institutions not only to lend to the sector but to innovate ways to better improve agricultural finance and production.

- **Creation of Enabling Environment for Agricultural Lending**

There is need for stakeholders to collaborate in order to create an enabling environment that will attract young school leavers and graduates into the agricultural sector. This can be achieved through provision of basic infrastructure such as pipe-borne water, road network, electricity and working tools and equipment. Government should channel subsidies to areas that demonstrate potentials for increasing the efficiency of agricultural production and, hence, its profitability. Incentives such as tax holidays for profits on agricultural lending could also be an added advantage to the financial institutions. Agricultural financing at the grassroots require peculiar products; for instance, while tangible collaterals are essential and effective in urban credit delivery, small-holder lending cannot provide such securities, and as such would require the promotion of appropriate products and methodologies.

- **Improvement in Extension Services/Donor Coordination**

A good number of donor agencies in Nigeria are active in various agricultural activities. While some are focusing on functional demand-driven programmes,

others, especially new entrants are still on the supply side. There is need to coordinate these activities not only to share experiences but for optimum delivery of intervention with reduced duplication of efforts. To improve extension services, extension workers must be regularly and properly trained and be supervised to ensure they are active, efficient and innovative. More so, sharing experiences with others in the same field would help in disseminating valuable information at minimum cost.

- **Deliberate Focus on Investing in Large-Scale Farming**

Nigerian agricultural population is basically rural and should be capacitated to achieve the objective of food security. Efforts should also be made to develop a new crop of properly trained agricultural practitioners that have capacity for managing big agricultural plantations, adopt improved technologies and interlink with research institutes, and markets as well as sources of raw materials. It is suggested that while efforts are being made by development agencies to meet the needs of small-holders such as through Fadama 2, the time is now ripe for strategic steps to be taken in favour of large-holders. In addition, specialization and large-scale production of identified crops should be encouraged.

- **Forward Integration and Funding of Value-Added Processing Activities**

Most successful large-scale farm businesses are integrated projects with backward and forward linkages. Bank support to agriculture should pursue the twin objectives of primary production and processing, either in one unit farm or linked with a firm that processes the primary farm products. This will not only guarantee market for the producers but put the products in forms that will improve shelf life, market and export potentials.

- **Reorganization of Lending Strategies for Better Efficiency**

Lending to agriculture under the current dispensation should be strictly market-driven. The Federal and State governments should create enabling environment that will attract young people, particularly school leavers and graduates to take agriculture as a profession. This can be achieved through systematic commitment to the provision of social amenities such as pipe-borne water, road network and electricity in rural areas. For instance, improved roads will ease the evacuation of products to the market on time and possibly bring about cheaper prices, while provision of electricity could enhance value-added processing opportunities that might increase the revenue of farmers. Also important, is the provision of working tools for agricultural extension staff to support the dissemination and application of research findings by the farmers. Support for research and extension would lead to increased output and, consequently,

increased returns on investment, profitability and higher debt capacity/repayment. Subsidies by government should be applied in areas that can increase the efficiency and profitability of agricultural activities.

Micro borrowers should be the targeted area of the microfinance banks while the deposit money banks should concentrate on large borrowers. The Bank of Agriculture (BOA) (formerly the Nigerian Agricultural Cooperative and Rural Development Bank (NACRDB)) should provide wholesale funds for on-lending activities of microfinance banks. Government subsidized credit to the agricultural sector should be channeled through the microfinance banks or other market-based financial institutions so as to promote harmony, market discipline as well as avoid market distortion in the financial sector.

VI. Conclusion

In Nigeria, like in most developing economies, agriculture offers hope for sustainable growth and development. It employs a large number of the population and produces what is needed for food, raw materials and foreign exchange earnings for the country. The suitable land, edaphic and climatic conditions creates rationale to utilize all necessary resources to unleash its potentials.

Cardinal to successful agricultural development in Nigeria is the critical role of credit. As most of the farmers in Nigeria are peasants and produce on small-holder basis, their credit needs are basically micro and small in nature. This, in itself, has been a disincentive to lending by financial institutions because of associated complexities and costs. The continued dearth of funds to this all-important sector necessitated the adoption of special programmes and schemes by the Central Bank of Nigeria. These include the Agricultural Credit Guarantee Scheme and its associated products as well as the microfinance banking programme. Under the Scheme, the deposit money banks and microfinance banks are expected to provide credit for farmers in Nigeria which are then guaranteed by the CBN. Despite these policies and programmes, a huge gap persists, owing to several challenges. Some of the challenges are specific to the lenders such as lack of skills and absence of agricultural finance departments in the banks, unwillingness to lend, as well as absence of rural branches. Other challenges pertain to the borrowers; such as the inability to keep and analyze records and make bankable proposals, low debt capacity, smallness of operations and lack of awareness on banking opportunities.

Attempts to address the agricultural micro credit gaps should focus the suggested strategies which include the need to educate farmers and create efficiency-enhancing environment; promote establishment of well-equipped agricultural finance departments in the banks; promote regular training for borrowers on simple record-keeping and farm managements; and for bankers on agricultural loans administration and risk management. There is also need to provide wholesale funding to support on lending activities of microfinance banks to farmers and improve extension services.

The Central Bank of Nigeria Partnership with Alliance for a Green Revolution in Africa (AGRA): Conceptual Issues, Operations and Prospects for Food Security in Nigeria

Paul N. Eluhaiwe*

I. Introduction

Food insecurity is a major risk for Africa. Of the 86 low-income and food-deficient declared countries the world over, 43 are in Africa where the majority of the world's 6.7 billion people live under the poverty line. In sub-Saharan Africa, although agriculture accounted for 70 per cent of the labor force and over 25 per cent of GDP, the continent has continued to register low priority for investment in agriculture.

While agriculture is key to economic growth and employment in Africa, agricultural productivity within the last 30 years declined to 0.5 tonnes/hectare, when compared with the global average of 5 tonnes/hectare. Africa now spends US\$30 billion for food import. African agriculture is, however, slowly responsive to the fast-changing global trends and dependence on foreign aid still remained a high risk to investment by commercial banks in Africa. Few lending institutions in the continent now accept farmers' assets as collateral and provide smallholder farmers with loans and also charge high interest rates. It has remained difficult and unappealing for growers to build-up their farms. This notwithstanding, significant opportunity to boost the continent's agriculture exists as the prospects of more African countries becoming self-sufficient in food supply and exports remains high.

Studies by the International Food Policy Research Institute showed that doubling the productivity of food staples across Africa by 2015 alone would lift over 70 million people out of poverty and move the continent from the food-deficit to food-surplus position and, thus, lower food prices by 20-40 per cent, increase Africa's export potential and enhance export competition. This would impact on inflation, exchange rate and level of foreign reserves which are key requisites for growth and development.

I.1 Agriculture in Transition and Implications for Nigeria

Nigeria, as one of the most endowed countries in Africa, has a per capita GDP of US\$1,760. The GDP growth of the country is largely driven by agriculture,

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contributing about 42.1 per cent to GDP and accounting for 70.0 per cent of the country's workforce.

Nigeria has 78.5 million hectares of agricultural land (85.0 per cent of the country's total land area) out of which 39.5 million ha is arable. Of the arable land, only 60.0 per cent have so far been cultivated. The country receives an average of 1,150mm of rain a year (35.0 per cent more than Mexico and 6.0 per cent more than India) and has potential to irrigate 3.1 million hectares of agricultural land. Presently, only 13.0 per cent of the country's agricultural land is irrigated.

Nigeria's agriculture includes four sub-sectors, namely, *crop*, contributing about 85.0 per cent to the agricultural GDP, *livestock*, accounting for about 10.0 per cent of the GDP, *fisheries* activities, contributing about 4.0 per cent, and *forestry* activities, responsible for about 1.0 per cent. The crops and livestock sub-sectors have remained dominant in recent years, while the fisheries sub-sector has also continued to expand. The forestry subsector has, however, been shrinking. Cropping systems in the country are primarily rain-fed, with less than 1.0 per cent of cultivated area under irrigation.

There is an urgent need to transform agriculture in Africa, to take advantage of the new global trends in food demand. While, historically, Africa has accounted for only 2.0 per cent of global agricultural trade, shifts in global demand for high-value agricultural crops and dairy products, fruits and vegetables, rising demand for processed and semi-processed food staples and the growth in demand for bio-fuel presents new opportunities for Africa. Also, as the level of global food demand continues to be shaped by increased industrialization, shift in focus from commodities to products, increased preference by consumers for quality food products as a result of income expansion and urbanization, would ginger improvements in grades and standards. For Nigeria to effectively increase its share in Africa's agricultural space and harness the market opportunities, the need to re-focus the country's agricultural financing policy to develop its agricultural food baskets and its commodity value-chains to meet the food market product demands, has become imperative.

1.2 Causes of Food Insecurity

Food insecurity refers to the inability to have access to sufficient and affordable food by everyone. This could relate to a single household or the entire global population. Globally, 10 million people die annually from hunger-related diseases;

half of these are children who die of malnutrition, while about 850 million people were food insecure in 70 low-income countries in 2005.

The causes of food crisis include, among others, the lack of obligation on the part governments to create capacity for their people to feed themselves; international trade policies orchestrated by WTO - systematic dismantling of trade barriers on agricultural products in favour of the West; lack of subsidies for agriculture in developing countries; poor budgetary provisioning for agriculture. For instance, in Africa the lack of political will to honour the Maputo declaration to set aside 10.0 per cent of annual budget for agricultural development; population burst; political unrest and violent conflicts in developing countries; failure to improve crop yields; speculative commodity marketing; under-investment in agriculture and infrastructure; the rising international crude oil prices which makes it expensive to produce and to consume and emerging persistent inflation; and malfunctioning of credit market worldwide following the USA subprime crisis, among others, have all contributed to food insecurity in the continent.

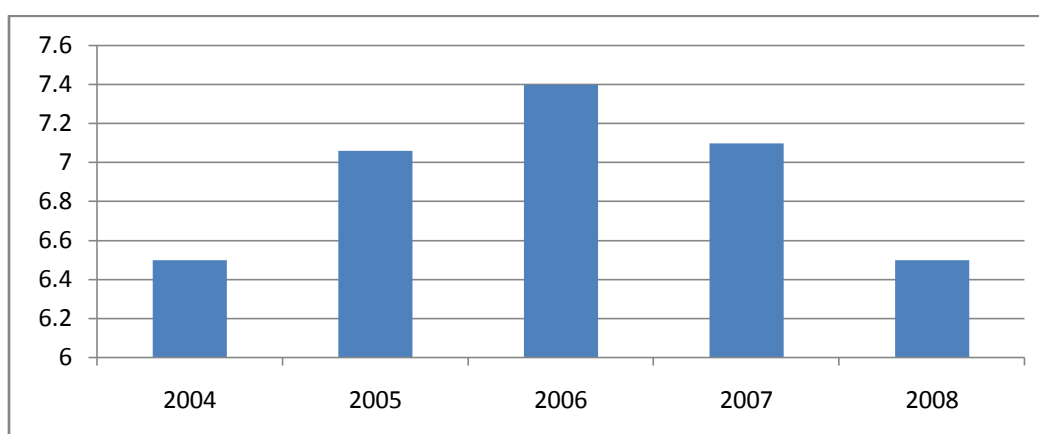
Table 1: Food Insecurity by International Regions – Under-Nourished By Region (%)

	1990-1992	1995-1997	2001-2003	2015 Target
Sub-Saharan Africa	33	34	31	18
Southern Asia	25	23	21	14
Eastern Asia	16	12	12	9
South-East Asia	18	14	12	10
Oceania	15	14	12	8
Latin America & Caribbean	13	11	10	7
Western Asia	6	9	9	4
Northern Africa	4	4	4	3
CIS, Europe	4	N/A	3	28
CIS Asia	16	N/A	20	9

II. Performance of Agriculture in Nigeria

Approximately 70.0 per cent of the farming population in Nigeria consists of about 10 million smallholders with about 7 million operating on land holdings below 2 hectares. The growth rate of Nigeria's agricultural sector has, however, been on the decline as the sector performance between 2006 and 2008 fell from 7.4 per cent in 2006, through 7.1 per cent in 2007 to 6.5 per cent 2008. Presently, the sector employs 70 per cent of the country's active labour force and accounts for about 42.1 per cent of GDP.

Figure 1: Growth Rate of Nigeria's Agricultural Sector GDP (2004-2008)



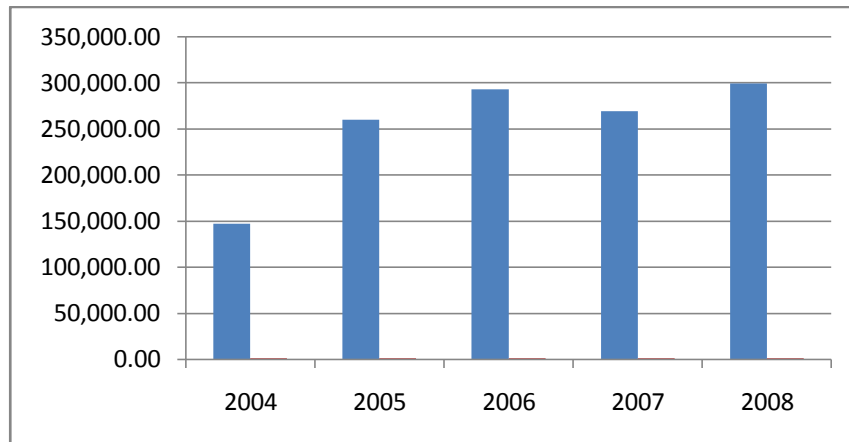
An analysis of Nigeria's agricultural sector revealed that production is heavily dependent on smallholder farmers who adopt manual approaches to farming. Also, only a small fraction of the smallholder farmers have access to finance. The condition under which these subsistence farmers operate which includes lack of access to technology, high covariance risk, lack of access to farm inputs, lack of financial literacy, resistance to change and other challenges, culminate into low yield and poor income. All these compromised agricultural productivity and, consequently, food security in the country.

II.1 Imperativeness for Improved Finance in Nigerian Agriculture

Nigeria remains a poor country in spite of her immense oil endowments. With a projected population of 149.1 million, unemployment rate of 12.8 per cent, a GDP of US\$1,760 million and a poverty incidence of 54 per cent and a fast declining agricultural labour force. As with many African countries, these factors have impeded the rapid economic development of Nigeria.

The performance of the sector has over the years not been encouraging. This is because Nigeria is a net importer of food. For instance, the import bills for food and live animals were ₦147.38 billion in 2004, ₦260.33 billion in 2005, ₦293.07 billion in 2006, ₦269.68 billion in 2007 and ₦299.48 billion in 2008 (Figure 2). The country has an annual population growth rate of 3.2 per cent and registered an unprecedented 5.4 per cent rate of rural-urban migration. The un-impressive situation had persisted since the economic depression of the 1970's when crude oil earnings plummeted. With the failure of oil windfalls to turn the Nigerian economy around, it follows that agriculture must be taken seriously as it remains the next most important sector of the country's economy after oil.

Figure 2: The Importation of Food and Live Animals into Nigeria



The need, therefore, to revitalize Nigerian agriculture calls for concerted efforts to improve financing, technology, resource supply, management, marketing and agric-business. The farmers need credit as catalyst to accelerate their adoption of improved agricultural technologies, finance for the procurement, maintenance, purchase of inputs and to meet their working expenses.

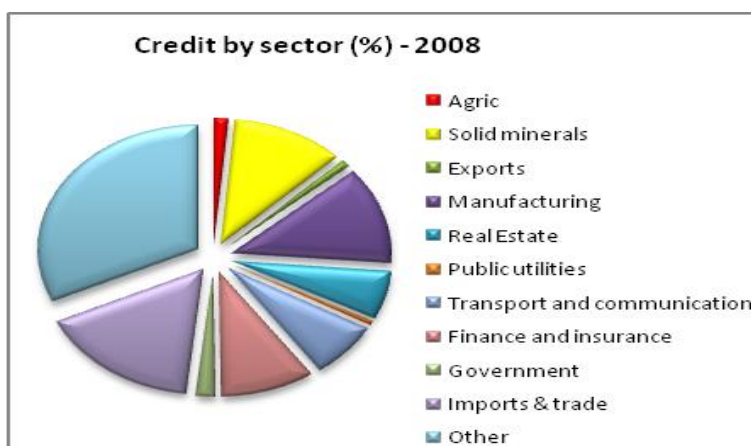
III. Efforts to Promote Agricultural Financing Opportunities in Nigeria

Nigeria's agricultural policy during the past years has been anchored on food import substitution and yield enhancement. This is aimed at reducing the country's dependence on the importation of basic food items, such as wheat, rice, sugar, etc., by producing them locally; and the promotion of national food security. It is also targeted at providing employment, stemming rural-urban migration, promotion of modern farm practices through commercial agriculture; and supporting of natural resource conservation to stem declining soil fertility and the moderation of indiscriminate destruction of the country's vegetation.

III.1 Role of Deposit Money Banks (DMBs) in Agricultural Financing

The Nigerian banking system has over the years shown a strong preference for short-term lending, as such, this has remained the dominant form of bank finance to Nigeria's agriculture. As at December 2008, outstanding loans and advances of less than one year maturity accounted for 75.4 per cent of all loans. Taking into account the peculiar need of the agricultural sector (requiring long-term finance), the capital needed by the agricultural sector in the country has been in short supply.

Presently, the agricultural sector of Nigeria accounts for only 1.4 per cent of total lending even though the sector accounts for about 42 per cent of the country's GDP.



III.2 Agricultural Finance Schemes Operated/Managed by the Central Bank of Nigeria (CBN)

The CBN has in the last three decades been involved in the design and implementation of various schemes and programmes aimed at addressing the problem of limited access to credit by small-scale producers ranging from such monetary policy instruments as the regulation with variants of credit quota and interest ceiling to the deregulated regime. The Bank co-financed the establishment of institutions such as the former Nigerian Agricultural Cooperative & Rural Development Bank (NACRDB) now the Bank of Agriculture (BOA), the Bank of Industry (BOI), Nigerian Agricultural Insurance Company (NAIC) and the Agricultural Credit Guarantee Scheme Fund (ACGSF).

The ACGSF with a capital base of ₦5.0 billion has in its 31 years existence provided guarantee to deposit money banks (DMBs) for loans valued ₦42.0 billion granted to 656,000 small and medium scale farmers in the country. The Bank also

complemented the ACGS with a ₦2.0 billion Interest Drawback Programme (IDP). The Scheme was an initiative which provided 40.0 per cent interest rebate to farmers under the ACGS who repayed their loans as at when due. Under the IDP, a total of ₦169.28 million has been paid to 21,212 deserving farmers.

The Agricultural Credit Support Scheme (ACSS) was initiated by the Federal Government and Central Bank of Nigeria with the active support and participation of the Bankers' Committee, and has a prescribed fund of ₦50.0 billion. The aims of the Scheme were to reduce the cost of agricultural production, increase output, generate exports and provide inputs for the manufacturing sector. Under the ACSS, credit facilities were extended to eligible borrowers by commercial banks at a maximum interest rate of 14.0 per cent per annum. While the farmers pay 8.0 per cent of the interest, the Central Bank of Nigeria pays 6.0 per cent of the interest due. Since inception in 2006 to October 2010; a total of ₦368.84 million has been paid as 6.0 per cent interest rebate obligation on 35 large-scale commercial agricultural projects.

The ₦200 billion Commercial Agriculture Credit Scheme (CACs), another financing effort of the CBN, is a seven-year, single-digit financing initiative meant to fast-track agricultural development, shore-up foreign exchange earnings, mitigate the food and financial crisis, encourage job creation and develop large-scale commercial agriculture with emphasis on value-chain financing (production, processing, storage and marketing). As at November 2010, the sum of ₦91.76 billion has since inception, been released under CACS by the CBN to 15 deposit money banks to finance 81 agricultural projects/promoters and 15 State Governments for release to farmers' cooperatives and unions under their constituencies.

The most recent efforts of the CBN expected to also have significant impact on agricultural development in Nigeria are the ₦200 billion Small & Medium Enterprises (SMEs) Guarantee Scheme (SMECGS) and the ₦500 billion Power, Aviation and Infrastructure Fund (PAIF).

IV. Why Banks are not Financing Agriculture

IV.1 Perception

Despite the availability of a plethora of schemes and programmes, banks are not still lending enough to agriculture because of the perceived high risk of lending to the sector. The perceived high risk is driven by factors such as lack of understanding of the agricultural sector and historically-derived risk structures attendant of high default rates from government-driven lending programmes.

They also do not perceive agriculture as a business because they are unable to access and price the risk elements. The challenge now is not to have additional funds to banks but ability to de-risk the sector to make it attractive for financing.

IV.2 Risks in Agricultural Lending

Although counter-party risks in agriculture may be high due to its nature, poorly-developed supply chains serving smallholder farmers, stochastic factors such as weather, pests and diseases or price volatility, farming systems and the differentiation of farmers are not often taken very well into consideration.

IV.3 Other Challenges

Banks neither understand the needs of agriculture nor do they have the capacity and skill to finance value-chain agriculture. As such, they do not see the sector as strategic. They lend based on opportunistic tendencies because agriculture suffers information asymmetry, lacks the required technology and the infrastructure to support it.

V. Nigerian Incentive-Based Risk Sharing System for Agricultural Lending (NIRSAL)

The Nigerian Incentive-Based Risk Sharing System for Agricultural Lending (NIRSAL) is the most recent agricultural financing initiative of the CBN aimed at providing farmers with affordable financial products, while de-risking agriculture and unlocking the access of input suppliers, farmers, agro-processors, and product marketers in the agricultural value-chain financing from financial institutions. Towards the realization of this objective, the CBN on August 9, 2010 signed an Agreement with the Alliance for a Green Revolution in Africa (AGRA) to develop the concept and implementation framework for the new agricultural financing mechanism that would unlock and expand the volume of lending, reduce the transaction costs and establishment of sustainable financial delivery platforms for agricultural business.

NIRSAL is a five-solution initiative that will build capacities of Nigerian banks to lend to agriculture, deploy risk sharing instruments that will lower the risks of lending, provide technical assistance for farmers and banks and develop a bank rating scheme that will incentivise and showcase/situate banks based on their capacities to lend to the agricultural sector. NIRSAL will also constitute a sub-fund of the Impact Investing Fund for African Agriculture that will:

- Stimulate innovations in agricultural lending.

- o Encourage banks that are lending to the agricultural sector.
- o Eliminate state-dependency by banks for deploying loanable funds to agriculture.
- o Leverage commercial bank balance sheets for lending to agriculture.
- o Ensure risk sharing approaches that will build a business approach where banks share in the risk of lending to the sector.

The five major components of NIRSAL are:

- i. **Risk Sharing Facility (RSF):** This will support the deployment of different risk sharing instruments to reduce the risk of lending by commercial banks to agriculture. This will include first-loss and shared-loss arrangements, depending on the volume of lending, the part of the value-chain that the bank wants to lend to, the term of lending and the type of bank, experience and capacity for agricultural lending.
- ii. **Insurance Component (IC):** Will identify existing insurable risks, existing solutions for coverage/assist in the development of such solutions and link such products to the loan provided by the banks to loan beneficiaries.
- iii. **Technical Assistance Facility (TAF):** To be used to support banks that have clearly demonstrated interest and verifiable commitment to entry into smallholder agricultural lending. The risk sharing fund and the technical assistance facility will be blended for banks to share risks and build capacity of banks to lend and build delivery platforms in support of agricultural lending. The technical assistance facility will also be used to build the capacity of smallholder farmers and assist them in managing market and financial activities.
- iv. **Bank Incentive Mechanisms (BIM):** Banks that lend significantly to agriculture will be further incentivized. This will be done through lower guarantee fees for the use of the RSF and access to further capital for agricultural lending at a lower rate from the Central Bank to be able to lend more.
- v. **Agricultural Bank Rating System (ABRS):** This will be done by reputable independent parties to rate banks based on their performance in

agricultural lending and impacts of the lending on food security, rural employment and incomes. The independently-developed rating scheme will be used to differentiate banks. Banks with higher ratings will be further incentivized through the Bank-Incentive Mechanism to do more lending to the agricultural sector. The system will also have a dedicated monitoring and evaluation system to track impacts and effectiveness.

V.1 Selection of Commodity and Financial Value Chains

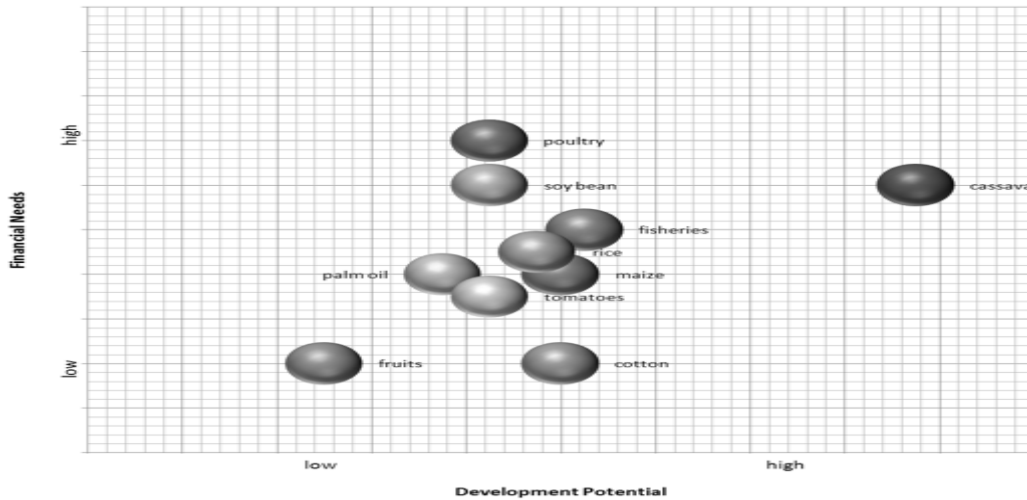
Selecting the enterprises to be financed under NIRSAL required a thorough scientific analysis of commodity and financial value-chain. Based on this, two teams were constituted. The first team comprised UNIDO, BOI and the CBN which conducted a study on value-chains. In addition, AGRA engaged Monitor Group to do a commodity value-chain analysis and identify the various bread baskets in Nigeria.

The exercise was aimed at prioritizing the commodity value-chains that will be considered under the pilot phase of NIRSAL. The study reviewed the financial requirements of the various agricultural value-chains in the country, collated the reaction of banks to the commodity value-chains and bread basket choices made, received suggestions on the innovative and workable methods for up-scaling agricultural lending. The study teams undertook a holistic diagnosis of Nigeria's agro-industrial value-chains and analyzed their various segments. The perspectives covered during the study include: mapping of bankable chains (Identification of Main actors and Uses); primary production and sourcing of inputs; processing capacity and technology; end-markets and trade; chain governance and linkages; resource productivity and environmental performance; macroeconomic and policy context; availability of finance, and financing requirements.

The outcomes of the analysis enabled the selection of value-chains to be financed based on impact on indices on the economy such as: incomes, employment, poverty reduction, food security, export earnings and import substitution. Based on the above criteria, ten agricultural value-chains (Figure 3) were selected for the country: cassava, cotton, fisheries, maize, fruits, oil palm, poultry, rice, soya beans and tomatoes. On the basis of the investment opportunities identified for commodity financing under the various segments of the value-chains; the CBN's decisions on where to invest/support value-chains was based on:

- (i) **Development Potential** – value-chains with the highest development potential and for which cassava, rice, meat/leather, soybean and fisheries were selected.
- (ii) **Financial needs** - commodities with high financial needs, for which meat/leather, poultry, soyabean, dairy and cassava were chosen.

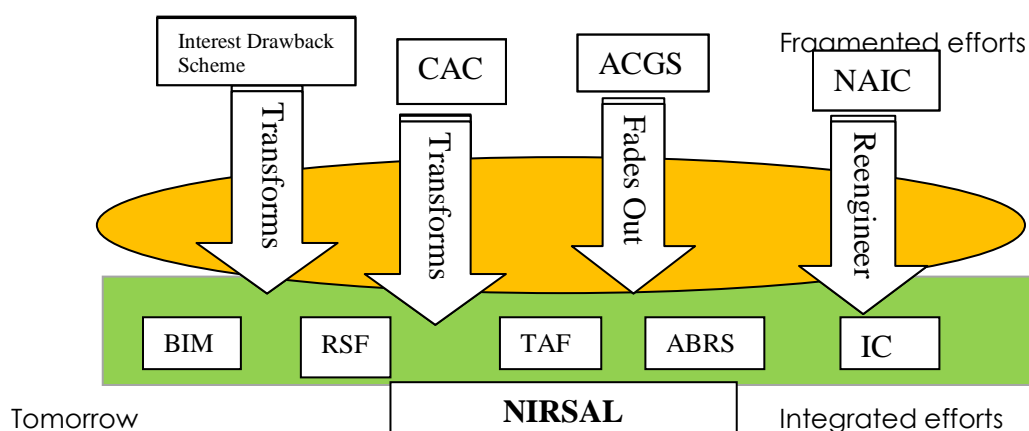
Figure 3: Strategic Decision Matrix for Financing of Value Chains in Nigeria



V.2 Conclusion: Actionable Steps towards the Actualization of NIRSAL

Informed by the low outreach of the ACGS, the multiplicity of schemes and programmes and the need to merge them, the shift in policy from being a managing agent to a policy input and supervisory organization, the CBN signed a Memorandum of Understanding (MoU) with the Alliance for Green Revolution in Africa (AGRA) on NIRSAL.

NIRSAL is intended to strategically re-engineer the country's agricultural finance landscape, decompose all existing initiatives, namely, the ACGS, IDP, ACSS, CACS and NAIC schematically shown below into NIRSAL's five (5) core components that will unlock the financing challenges of the country's agricultural sector:



The CBN in its vigorous pursuit to change the agricultural financing landscape of Nigeria has not only moved NIRSAL from the concept phase but taken it into the design phase. Presently, along the five-solution component of NIRSAL, work streams were designed to collaborate with foreign and local consultants. Ahead of NIRSAL's roll out and implementation, a retreat would be held with stakeholders to validate the concept, confirm acceptance of the commodity choices recommended by the consultants as well as securing the needed buy-in of all parties. To further firm up NIRSAL's actualization, the Bank is proposing as follows:

- A 5-man Steering Committee to comprise of the CBN Governor as Chairman, Honourable Ministers of Agriculture & Rural Development (FMA & RD), Finance and Commerce and the Vice-President of AGRA be established.
- The Bank of Agriculture (BOA), Nigerian Agricultural Insurance Corporation (NAIC), Bank of Industry (BOI) and the Nigerian Export-Import Bank (NEXIM) be co-opted into the relevant work streams of NIRSAL.
- Implementation of the pilot of NIRSAL is to commence with some enterprises to be selected based on the business plan and opportunities presented by such states that fall under identified breadbasket regions. Here, participation would strictly be based on business cases i.e. for states that will show commitment in the provision of arable land, roads, security, tax relief and other incentives that will be attractive to industrialists. Meetings are already being held between the Bankers Committee on Economic Development and Governments of some states on modalities for making the initiative operational.

SUBMISSION OF MANUSCRIPT TO CBN ECONOMIC AND FINANCIAL REVIEW

1. Three (3) hardcopies and a softcopy of the original manuscript should be addressed to the:

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CBN Economic and Financial Review
Research and Statistics Department
Central Bank of Nigeria
P.M.B.0187, Garki, Abuja

The softcopy of the papers can also be submitted via email as electronic document, preferably Microsoft word document to either of the following email addresses: cnomordi@cbn.gov.ng; aoadenuga@cbn.gov.ng

The article should not be more than 30 pages on A4 size paper and should be typed double-spaced with a margin of 1.5 inches on all sides. The manuscript **must** be accompanied with a letter of submission written in English. Submission of a paper is assumed to imply that its contents represent original and unpublished work and is not under consideration elsewhere for publication. Normally, the review process is expected to take not more than three months. There is neither a submission charge nor page fee. A return address (postal/email) should be indicated.

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5. The purpose and scope of the article should be clearly stated in an abstract summarizing the article's essential points. The abstract should be typed on a separate page and should be between 80-100 words in length. In addition, the JEL classification code (s) as well as keywords should be clearly indicated on the abstract page.

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Oresotu, F.O. and Mordi, C.N.O. (1992). "The Demand for Money Function in Nigeria: An Empirical Investigation." *CBN Economic and Financial Review*. Vol.30.No.1 pp.32-69.

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