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AFRICAN MONETARY ZONE (WAMZ): IMPERATIVES
FOR FINANCIAL SYSTEMS DEVELOPMENT
BY ADENIYI O. ADENUGA, KANAYO K. OGUJUIBA, PhD AND
MICHAEL E. OBIECHINA

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BY OKOO. MBUTOR AND DINCHI. J. YILKUDI (MRS.)



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A COMMON ECONOMIC SPACE FOR THE WEST AFRICAN MONETARY ZONE (WAMZ): IMPERATIVES FOR FINANCIAL SYSTEMS DEVELOPMENT¹

ABSTRACT

The international financial turmoil of the 21st century has provoked much reflection and analysis within the international community on ways to strengthen the international financial architecture. It left behind important lessons, while exposing the limitations of individual country policy frameworks for preventing a systemic crisis. However, the issue of whether a common economic space is feasible within the West African Monetary Zone is still doubtful, given current efforts towards monetary union in Sub-Saharan Africa. This paper adopts an empirical review approach, identifying benefits and key constraints to a common economic space in the WAMZ vis-à-vis macroeconomic development in the WAMZ, with a view to deepening financial sector dynamics in the region. The review leads to the following broad conclusions: that financial sector development in the region is needed in facilitating economic integration, growth and poverty reduction as well as the need to balance financial innovation and economic stability. The paper concludes with strategies for promoting integration in the region that would ultimately create an open and integrated market among the WAMZ countries. This will leverage further opportunities for economic operators, promote trade and investment, and reinforce economic cooperation, reforms and competitiveness of the region.

INTRODUCTION

egional integration is now widely accepted as indispensable for expanding economic opportunities in Africa. Bigger markets permit better exploitation of economies of scale, while factor mobility across borders and the coordination and harmonization of monetary and fiscal policies would facilitate faster economic growth and greater welfare for the participating countries. African countries consider regional integration the most direct route to fast, broad-based development and an effective way to overcome the limitations of small internal markets. They also perceive regional integration as a rallying platform for establishing African unity. Resilient, wellregulated financial systems are essential for macroeconomic and financial stability in a world of increased capital flows. Most African countries, particularly those in sub-Saharan Africa, have recently undergone extensive financial sector reforms. In any economy, the financial sector is

the hub of productive activity. It comprises an effective network of banks and other financial institutions and a wide range of financial instruments.

The path to a single economic space cum integration is a continuum of actions; a process not an event, starting with sharing information, moving to sharing processing facilities, to harmonizing laws and regulations, and eventually to unified licensing and inspection of institutions and the introduction of a common currency, with the ultimate objective of achieving a single financial space. However, financial intermediaries and financial systems in the WAMZ suffer from diseconomies caused by small scale challenges and raise a pertinent question as to how they would support a single economic space. It is possible to overcome, at least in part, such diseconomies by opening up financial systems. Nonetheless, the financial system in the sub-region could be designed to foster integration and act as a catalyst to increase openness in financial services

¹ The views expressed in the paper are those of the author and do not in any way represent the official position or thinking of the Central Bank of Nigeria. The author acknowledges the comments and criticisms of anonymous reviewer.

markets in order to create greater opportunities to citizens of member countries.

Economists have debated on the nature of the growth-poverty nexus: whether and to what extent economic growth leads to poverty reduction. Furthermore, there were questions over whether financial sector development can bring direct benefits to the poor. The last two decades, however, have seen the emergence of a consensus on the vital importance of financial sector development in facilitating real growth and supporting poverty reduction, and this has been backed up by a large body of empirical studies providing evidence of the causal linkages from financial sector development to economic growth and poverty reduction. While the benefits from a common economic space vis-à-vis financial integration are substantial, the process of integration is by no means easy. Indeed, there are a number of costs and difficulties that countries face on the road to the creation of a single financial space. From a political perspective, there is a loss of sovereignty inherent in all phases of integration as countries cede elements of decision-making, including control over financial policy. This also has important economic consequences as the loss of control over aspects of monetary and exchange rate policy and the capital account have implications for the ability of governments and central banks to manage shocks to their economies and their countries' external competitiveness. Furthermore, there is the risk that benefits may not be distributed equally among countries². Lastly, there is the risk that unless it is accompanied by increased competition, regional financial integration may result in only efficiency gains (and profits) for financial institutions, yet do little to

improve access to financial services for the majority of the population.

The WAMZ programme is a fast track initiative to economic and monetary integration in West Africa, adopted by the authority of Heads of State and Government of Economic Community of West African States (ECOWAS) at its Summit in Lome; Togo in December 1999. It was agreed at the Summit that a second monetary zone, WAMZ, should be established which would eventually merge with the West African Economic Monetary Union (WAEMU) to create a single ECOWAS monetary union. The WAMZ reaffirms financial sector development as one of its core areas of operations in the coming years in support of inclusive and sustainable economic growth, regional integration, and poverty eradication in ECOWAS.

The main objective of the paper therefore is to examine the imperatives for financial system development in a common economic space for the WAMZ. Accordingly, following the introduction, the paper is divided into five sections. Section two discusses opportunities, risks and vulnerabilities in the WAMZ, while theoretical framework and literature review is contained in section 3. Section 4 presents macroeconomic performance of WAMZ countries. Discussion on a common economic space and strategies for integration in the WAMZ are covered in section five, while the paper ends with summary and conclusion in section six.

(2.0) Opportunities, Risks and Vulnerabilities in the WAMZ acroeconomic stability, monetary and financial integration are crucial for successful regional cooperation and integration. Both processes

make decisive contributions to the creation of an enabling environment for economic growth, promotion of trade and boosting of investor confidence. The strengthening and deepening of the financial sector, including the establishment of vibrant capital markets, will amongst others, facilitate the flow of funds help anchor and macroeconomic policies. In addition, strong national and subregional capital markets play a catalytic role in attracting FDI and promoting cross-border investment flows. The policies should be situated within the socio-political, technological and international development setting of the countries, and the region at large. When these policies are conceived in a wider economic space, possibilities for enhanced economic gains and growth are likely to be optimized and resources more efficiently used. Concerning labour market mobility, the ECOWAS protocol guaranteeing free movement of persons within the sub-region is partially being implemented, and albeit at a slow pace. The protocol on residents and establishment, including freedom to seek gainful employment has not been fully implemented. Indeed, non-citizens are given a maximum of 90 days stay and the permit clearly states that employment is prohibited³. There are varying levels of exchange control in the WAMZ countries and little liberalization of capital accounts. Unfortunately, both the controls themselves, and the residual bureaucratic processes, are distorting the financial markets and their capacity to provide effective service to economic growth. Inter-bank markets are relatively underdeveloped. National markets exist to some extent, but are likely limited by the degree of confidence the banks are prepared to place in one another. Although a full-fledged

² For example, there is concern among the smaller countries in ECOWAS that the benefits of integration will primarily accrue to Nigeria, while similar fears are present in the EAC with regard to Kenya, and in the SADC with regard to South Africa.

cost-benefit analysis has not been undertaken, but preliminary analysis suggest that the costs of losing exchange rate flexibility in the WAMZ are generally limited.

The financial system in the WAMZ still remains fundamentally fraaile and vulnerable to several external risks, including: the high dependence on primary products; economic mismanagement, (especially fiscal imprudence); weak institutions; and political uncertainty. Given the large size and role of government in the region, fiscal indiscipline is the single most important threat to these economies. The development of monetary union as well as the willingness of member states to facilitate progress towards a common market in financial

services by harmonizing legal and regulatory frameworks, are clearly hampered by the heterogeneous nature of WAMZ. There are enormous disparities in the size and sophistication of the economies of the members. Furthermore, the member states are not geographically contiguous, which limits the impetus for regionalization and harmonization which would have been provided by significant intra-WAMZ trade in goods and services (as can be seen in the East African Community where trade routes and geographical contiguity are clearly providing an incentive for progress). Payments System Project which is key and fundamental for any meaningful integration is not moving at the same speed across the WAMZ.

Furthermore, the WAMZ capital market in general is still very much rudimentary. In both Ghana stock Exchange (GSE) and Nigeria Stock Exchange (NSE), stock prices are regulated and only a margin of plus or minus 5.0 per cent is

permitted for price fluctuations. The two exchanges are yet to engage in trading or listing relationship although each of them has such relationship with other exchanges (GSE with London Stock Exchange and NSE with Johannesburg Stock Exchange). The Gambia and Guinea are at the preparatory stage of establishing stock exchanges, having passed through a conceptual stage of setting up stock exchanges. A legal framework to establish the Conakry Stock Exchange and a Securities and Exchange Commission was passed in 1997 but it is yet to be operationalized. The Gambia is still undertaking a comprehensive study for an exchange. The Sierra Leone Stock Exchange (SLSE) which was inaugurated in July 2007, commenced operations in 2009 with one company listed. Ghana and Nigeria have functional Securities and Exchange Commissions while Sierra Leone is in the process of enacting a legislation to set up a Commission. The Gambia and Guinea are expected to embark on the process of establishing securities and exchange commissions after setting up stock exchanges. As was the case in Ghana and Nigeria before the establishment of the Securities and Exchange Commission (SEC), in the other WAMZ countries, the central banks are playing the typical role of SEC as regulators of the capital market. Each of the central banks has a unit that carries out capital market regulation.

Financial sector stability in the region would depend on policy credibility, founded upon a reliable judicial system, transparency, and well-defined institutional responsibilities. Legal and regulatory enforcement are needed in the region to ensure action is taken against those that violate their prudential and

financial regulations, and act as a credible deterrent for all market participants. Large informal sector with a preponderance of lowincome households in the region poses another challenge. Inflationary pressures, which have slipped to double digits over the past years; high cost of doing business in the region; inadequate infrastructure; lack of standardization; and weak capacity of both institutions and personnel in the financial sector have added to the fragility and underdevelopment of the financial systems in the sub-region. Another factor possibly reducing the impetus for integration is the enormous disparity in levels of economic development between the WAMZ members, which is creating an element of fear that further integration of the financial markets would only result in a oneway stream of outward investment from Nigeria (and to a much lesser extent Ghana), with smaller countries' domestic financial institutions being unable to take advantage of access to the Nigerian and Ghanaian markets due to their small size and lack of access to capital. The rapid expansion of Nigerian banks into WAMZ countries, the total absence of banks from other WAMZ countries in Nigeria and the very high barrier to entry posed by Nigeria's minimum capital requirement for banks and insurance companies all tend to support this fear and would tend to undermine support for further integration in the form of further opening of non-banking financial markets. Most recently, Ghana has imposed discriminatory minimum capital requirements on foreignowned banks in order to protect Ghanaian-owned banks: by end-2009 foreign banks must have GHC 60 million (about US\$ 43 million) in capital whereas Ghanaian banks have until end-2010 to have GHC 25 million (US\$ 18 million), and until end-2012 to meet the GHC 60

⁴These households have limited access to demand-oriented financial services such as savings, loans, and insurance, often resulting in vulnerability to adverse shocks

There are both theoretical and

million requirement. In Guinea, Gambia and Liberia, there is still a high sense of uncertainty surrounding the legal and regulatory framework for business activity which also raises the perception of the risk associated with investment⁵.

(3.0) Theoretical Framework and Literature

ver the last decade. empirical studies assessing various regions and time periods have supported the notion that both financial intermediaries and markets play a key role in economic growth. Moreover, numerous studies have found that better developed financial systems ease the financing constraint faced by enterprises, particularly small firms. Hence, the preponderance of evidence suggests that financial systems do not merely respond to economic growth, but induce the necessary environment for economies of scale. Research has increasingly found financial development to have a causal effect in stimulating economic and productivity growth. Over time, the development of a financial system works to reduce market inefficiencies and failures. In a well-functioning financial system, financial contracts, markets and intermediaries act to reduce the costs of acquiring information, enforcing contracts, and making transactions. Financial instruments and institutions, in turn, influence the allocation of financial resources within an economy in favor of the more efficient use of capital. Thus, a developed financial system is better equipped than an underdeveloped one to perform the following functions: producing information and allocating capital; monitoring firms and exerting corporate governance; trading, diversification, and risk mitigation; mobilizing and pooling savings; and easing exchange of goods and services.

empirical evidence suggesting that the development of the financial sector accelerates economic growth. Bagehot discussed the relationship between the sector and economic growth in the 19th century. Schumpeter (1934) stressed the role of banking sector as a financier of productive investments and in that way, as an accelerator of economic growth. Most of the relevant theoretical models have been, however, developed after the birth of endogenous growth theory. Basic AK developed after the endogenous growth theory; find three ways by which the development of the financial sector can affect economic growth. First, it can increase the productivity of investments; secondly, more efficient financial sector reduces transaction costs and thus widens the share of savings and productive investments. Thirdly, financial sector development can affect savings rate, either upwards or downwards (Pagano, 1993). Greenwood and Jovanic (1990), Levine (1991), Bencivenga and Smith (1991) as well as Saint-Paul (1992) have constructed theoretical models in which an efficient financial market improves the quality of investment and accelerates economic growth. In the model of Green and Jovanic (1990), financial intermediaries' prime task is to channel funds to the most profitable investments. Higher rates of return on capital to be earned promote growth and economic growth provides the means to implement costly financial structures. Financial sector also improves the liquidity of investments. In the model of Levine (1991), the stock market improves firm efficiency because they eliminate the premature liquidation of the firm capital. In case of liquidity shocks, the investor can sell the shares to another agent. Both of these ways

accelerate economic growth. In the model constructed by Bencivenga and Smith (1991), the financial sector increases the liquidity of investments and decreases the premature withdrawal of investors, which are harmful to economic growth. If the financial markets work properly, investments to the nonliquid objects which are more productive to the economy increases.

According to Saint-Paul (1992), productive growth must be achieved through a greater division of labour and specialization of enterprise. The greater specialization causes a bigger risk. The role of the financial market is to support enterprises in specialization by permitting investors to hedge by holding diversified portfolios. Without deepening of the financial market, specialization would be too risky for an individual investor and there would be efficiency loss in the system. Blackburn and Hung (1996) have found a two way causal relationship between growth and financial development. Without intermediation, every single investor should individually monitor a project and the costs of monitoring would duplicate. If the financial sector is developed, the monitoring task can be developed into an intermediary. In this case, transaction costs are reduced and bigger share of savings can be allocated to investments. This accelerates economic growth. Blackburn and Hung (1996) further show how a country can be trapped in a vicious circle of low economic growth and low financial development. This happens if the initial technical development of the country is very low and new designs too are low. Harrison (1999) argues that economic growth increases banks activities and promotes entry of more banks. This entry shortens the

⁵Property rights and contracts in these countries have not yet been enforced, opening the door to corruption.

average distance between banks and clients and lowers transaction costs in the system. According to the endogenous growth theory, the higher the savings rate, the higher the economic growth. The development of the financial sector can affect savinas in three ways. First, by reducing idiosyncratic risks, financial markets might lower the level of precautionary savings by households and thus the growth rate Tsuru (2000). Secondly, a reduction in rate of return risk by portfolio diversification can have ambiguous effects on savings Tsuru (2000). Thirdly, by lowering liquidity constraints, the development in the financial sector can lower savings rate.

The relationship between economic growth and financial sector has been one of the most heavily researched topics in development economics. Hundreds of scholarly papers have been written to conceptualize how the development and structure of an economy's financial sector affect domestic savings, capital accumulation, technological innovation, and income growth, or vice versa; and to empirically test these linkages including identifying directions of the causality and their relative importance using cross-country; country-specific; and industryfirm, and project-level data. Several authors have surveyed this large literature (see, for example, Honohan 2004a, 2004b; DFID 2004; Levine 2004: and Andrianova and Demetriades 2008). Earlier literature suggests significant disagreements on the financegrowth nexus. For instance, Joan Robinson (1952) argues that "where enterprise leads, finance follows", meaning that finance does not cause growth, but rather, it responds to demands from the real sector. Nobel Laureate Robert Lucas (1988) also dismisses finance as an "over-stressed" determinant of economic growth. On the other hand, Nobel Laureate Merton

Miller (1988) argues "that the financial markets' contributions to economic growth is a proposition too obvious for serious discussions." Schumpeter (1911), Gurley and Shaw (1955), Goldsmith (1969), and McKinnon (1973) all saw the importance of the finance-growth nexus in understanding economic growth. Finance has a prominent role in the endogenous growth theory, through its positive impact on the levels of capital accumulation and savings (Romer 1986) or of technological innovation (Romer 1990, Grossman and Helpman 1991, and Aghion and Howitt 1992).

Recent literature suggests the emergence of a consensus on the vital importance of financial sector development in facilitating and sustaining growth. The last two decades have witnessed an explosion of empirical studies testing the finance-growth nexus using cross-country and other data and new econometric tools. Despite the absence of complete unanimity of results, a number of observations, backed by empirical evidence, have emerged. Levine (2004) summarizes these as follows: (i) countries with better functioning banks and financial markets grow faster; (ii) there is existence of simultaneity bias (i.e., the reverse causality) does not seem to support this conclusion; and (iii) better-functioning financial systems ease the external financing constraints that impede firm and industrial expansion, suggesting that this is one mechanism through which financial development matters for growth. Economists believe that the most important role of the financial sector in facilitating arowth is to reduce transaction costs. This is achieved through a number of specific functions that the financial sector performs. On the basis of an extensive survey of the literature, Levine (2004) identified and summarized five

key functions that a financial system provides in facilitating growth:

1. Mobilizing and pooling savings:

Savinas mobilization as a process of agglomerating capital from diverse savers for investment is very costly. Mobilizing savings involves overcoming transaction costs and informational asymmetry problems. Financial systems that are more effective at pooling the savings of individuals promote economic development by 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 improve resource allocation and accelerate growth. Improved information also helps to identify the best production technologies and those entrepreneurs with the best chances of successfully initiating new goods and production processes. Stock markets may also stimulate the aeneration of information about firms. As markets become larger and more liquid, agents may have greater incentives to expend resources in researching firms because it is easier to profit from this information by trading in big and liquid markets.

3. Monitoring investments and exerting corporate governance:

The degree to which the providers of capital (shareholders and creditors) can effectively monitor and influence how firms use their capital and induce managers to maximize firm valuethat is, to resolve the "agency problem" arising from the separation of ownership from control through effective corporate governance mechanismshas 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. Although there are countervailing arguments, many believe 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 (Zhuang et al. 2000).

4. Facilitating the trading, diversification, and management of risks:

Financial systems help to 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. Crosssectional risk diversification stimulates technological innovation since engaging in innovation is risky, and the ability to hold a diversified portfolio of innovative projects reduces risk and promotes investment in growth-enhancing innovative activities. Besides cross-sectional risk diversification, financial systems also improve intertemporal risk sharing and smoothing across generations. Further, financial systems enhance liquidity, reduce liquidity risks, increase investment in longer-term, higher-return, but illiquid assets, and promote economic arowth.

5. Facilitating the exchange of goods and services:

A financial system facilitates transactions in the economy, both by physically providing the mechanisms to make and receive payments and by reducina transaction and information costs as described earlier. Therefore, the financial sector facilitates tradina of goods and services, and promotes specialization, technological innovation, and growth. Transaction and information costs may continue to fall through financial innovation. More specialization requires more transactions, and more transactions lead to greater specialization. In this way, markets that promote exchange encourage productivity gains. There may also be feedback from these productivity gains to financial market development, and thus spur economic development in the long run.

The discussion on a single economic space is premised on financial, economic and monetary integration, which is essentially predicated on the Optimum Currency Area (OCA). The OCA is a useful starting point for any discussion on regional integration vis-à-vis a single economic space. It addresses the central question of whether a monetary union should be pursued. Mundell (1961) defines the optimum currency area as a region in which factors of production are internally mobile but internationally immobile, so as to facilitate the intra-regional redistribution of resources in response to demand shifts. Kaboub (2001) describes it as the "optimum geographical domain with means of payment either as a

single common currency, or several currencies whose exchange rate values are immutably pegged to one another with unlimited convertibility for the purposes of both current and capital transactions, but whose exchange rates fluctuate within a band against the rest of the world".

The first characteristic of an OCA is price and wage flexibility, which was the basis for Friedman's argument in favour of flexible exchange rates. The second is that of financial market integration, suggesting that a successful currency area must be sufficiently integrated in financial trading. The third characteristic is that of factor market integration. This includes internal factor mobility, both inter-regional and inter-industry mobility. The fourth is the integration of the goods market, suggesting that a successful currency area must have a high degree of internal openness that could be measured by the marginal propensity to import, or the ratio of tradable to non-tradable goods in production or consumption.

An OCA requires a close coordination of national monetary authorities or even the creation of a supranational central bank, which implies the surrendering of the national sovereignty over the conduct of monetary policy. Other characteristics include factor mobility, especially, capital and labour, and the integration of the goods market. In recent times, issues of symmetry and asymmetry shocks have also been raised in the empirical literature. Generally, based on available quantitative and qualitative assessments, the monetary union arrangements in Africa does not satisfy the OCA textbook conditions when measured against the following criteria: income structure; product market flexibility; labour market mobility; degree of openness,

intra-trade relations; and asymmetric terms of trade shocks.

The theoretical underpinning of policy convergence essentially comes from the analysis of policy making in an integrated region (De Grauwe, 2000). A simple example would suffice to clarify the argument. Suppose that countries A and B achieve some form of monetary integration (i.e. a system of fixed exchange rates or a currency union) so that they implement a common monetary policy. Assume also that policy makers in country A are conservative, preferring lowinflation equilibrium to one with high inflation in the inflationunemployment trade-off. Policy makers in country B are liberal and prefer the equilibrium with low unemployment (and hence high inflation)6. Country A will push for a conservative stance, while B opts for a liberal one. The resulting policy conflict has two implications. First, there will be a political-economic problem of aggregation of heterogeneous preferences. Second, the preferred monetary policies under autarchy will likely differ from the actual common monetary policy under integration. Thus, for one of the two members of the union or may be even for both there will be the temptation to abandon the initiative, unless some kind of compensation mechanism is engineered. For instance, economic integration is expected to produce macroeconomic stability in the form of low inflation. However, if the participation of a country B (with a preference for a

high-inflation equilibrium) shifts the common monetary policy in favour of high inflation, then the anti-inflation gains would be smaller and a country like A would be worse off than under autarchy. Similarly, countries with large fiscal deficits, being more likely to use inflationary finance, are likely to make the common monetary policy less conservative.

(4.0) Macroeconomic Performance of Countries in the WAMZ

ccordingly, the WAMZ have introduced both a primary and secondary convergence criteria to make the economies of their members move in lockstep toward the goal of policy harmonization for the ultimate establishment of a monetary union. The criteria established to measure the convergence of the real and financial variables in the member countries include the budget deficit ratio, inflation rate, central bank financial or liquidity ratio, external reserves, level of exchange rate variation and movements, tax revenue ratio, public sector wage/tax revenue ratio and public investment/GDP ratio. The convergence policies also provide for financial integration to allow the WAMZ countries to develop and harmonize their money and capital markets, in order to ease payment systems and provide credible sources for medium- and long-term securities to stimulate investments. Howbeit, both monetary and fiscal policies of the region must be properly

articulated and implemented in a coordinated, predictable manner, because of their overarching importance for macroeconomic stability, domestic resource mobilization and economic growth, (see tables that follow).

In 2009, the Nigerian monetary policy was aimed at maintaining single digit inflation. However, the single-digit inflation criterion was not met as the inflation rate still remained double digit (see table 1 above). There was however, an improvement in the level of inflation as the rate declined from 15.1 percent at end-December 2008 to 12.0 percent in December 2009. The slow down in the inflation was attributed largely to the decline in global food and fuel prices. Nigeria's performance on the single-digit inflation criterion has been mixed over the years. The rate of inflation was in double digit from 2001 to June 2006, when the rate dropped to 8.5 percent. The country sustained this performance by maintaining the rate at 6.6 percent by end-December 2007 and 9.7 percent in May 2008. The fiscal deficit/GDP ratio stood at 3.3 percent during the review period slightly higher than the 3.0 percent provided in the 2009 budget. The level of deficit was below the bench mark of 4.0 percent, but significantly higher than the 0.2 percent attained in 2008. The current trend is expected to reverse to a deficit of 3.1 percent in 2011 given the current prudent fiscal policy stance of the government. The country's performance with regard to this criterion has been consistent

Table 1: Primary Convergence Criteria - Nigeria

Primary Criteria	Target	2001	2002	2003	2004	2005	2006	2007	2008	2009
Inflation Rate (end period)	Single digit	16.5	12.2	23.8	10.0	11.6	8.5	6.6	15.1	12.0
Fiscal Deficit/GDP (%) excl. grants	≤ 4%	-3.2	-3.9	-2.0	-1.2	-1.3	-0.6	-0.6	-0.2	-3.3
Central Bank Financing of fiscal deficit as % of previous year's tax revenue	< 10%	0	0	37.6	0	0	0	0.0	0.0	0.0
Gross External Reserves (Months of Imports)	≥ 3	8.9	6.2	4.9	11.6	11.0	17.3	14.8	17.2	17.7
Criteri(um)a satisfied		3	3	2	3	3	4	4	3	3

Sources: Nigerian Authorities & WAMI Staff

 $^{^6}$ After controlling for shock asymmetries, the two countries would tend to have different policy preferences or objectives.

throughout the convergence period with an exception in 2003, when a performance of 37.6 percent was recorded. It is expected that the country will maintain her attainment of this criterion, provided the current fiscal policy stance of government is sustained. Nigeria's gross external reserves as at end-December 2009 stood at US\$42.4 billion, capable of providing 17.7 months of import cover. Even though there was huge depletion of reserves during the review period, due to falling oil revenue, the achievement of this criterion was sustained.

With respect to the primary convergence criteria, indicative data (table 2) shows that Ghana met two of the criteria: namely central bank financing of fiscal deficits and gross external reserves in months of import cover. Central Bank financing of fiscal deficit was zero, while gross external reserves approximated 3.9 months of imports cover⁷. Even though only two primary criteria were met, the performances of the other two criteria appear to be improving.

Inflation fell to 16 percent from 18.1 percent in 2008, while the fiscal deficit as a percentage of GDP shrank to 12.3% from 18.6% in 2008. The Ghanaian economy recorded an end-of-period inflation of 16.0 percent, indicating that the single digit criterion was not met. However, this was an improvement when compared to 2008 end-of-period inflation of 18.1 percent. Considering the consistent decline in CPI inflation during the second half of 2009, there is some optimism that inflationary pressures will continue to ease in 2010 and it is likely that this criterion will be met, at least, over the medium term. Ghana also failed to satisfy the fiscal deficit criterion of not more than 4 percent of GDP. The recorded deficit, excluding grants, was 12.3 percent. This was an improvement on the 18.6 percent recorded at end 2008. Although this criterion has remained elusive for most WAMZ countries, Ghana has strengthened its policies in a bid to significantly reduce the deficits8. The rebasing, coupled with expenditure tightening and improvement in revenue

mobilization, will enhance the prospects of achieving this target by end 2010. Performance with respect to Reserves criterion improved significantly during the review period with Ghana recording 3.9 months of import cover, up from 2.2 months recorded at end 2008. The WAMZ benchmark of 3 months of import cover was therefore met. The deficit incurred in 2008 was financed by the market through the issuance of three year Government bonds. The overall budget deficit was financed from domestic and external sources with 82.5 percent of the domestic financing coming from the commercial banks. With continuous increases in external resource inflows and their consequential relaxation of resource constraints on the economy, the deficit financing by the central bank would be kept within the WAMZ benchmark in 2010.

In The Gambia, inflation picked up significantly over the period 2002-2003, with annual average inflation rising from being single

Table 2: Primary Convergence Criteria Ghana

Primary Criteria	Target	2001	2002	2003	2004	2005	2006	2007	2008	2009
Inflation Rate (end period) Fiscal Deficit/GDP (%) excl. grants	0								18.1	16.0
Central Bank Financing of fiscal deficit as % of previous year's tax	<10%		12.1		27.7			0.0	38.7	
Gross External Reserves (Months of Imports*)	≥ 3	1.4	2.7	5.0	4.6	4.0	3.7	3.9	2.2	3.9
Criteri(um)a satisfied	_	1	0	2	2	2	2	2	0	2

Source: Ghanaian Authorities and WAMI Staff

Table 3: Primary Convergence Criteria Gambia

Primary Criteria	Target	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Inflation Rate* (end-period)	Single Digit	0.2	8.1	13.0	17.6	8.0	1.8	0.4	6.0	6.8	2.7
Fiscal Deficit/Surplus/GDP (%) excl. grants	Single Digit ≤4%	0.2	-10.0	-9.1	-7.6	-8.6	-7.4	-2.7	-1.0	-3.3	-8.3
Central Bank Financing of Fiscal Deficit as % of previous Year's Tax Reven	ue < 10%	0.0	30.7	76.1	63.1	0.0	0.0	0.0	0.0	0.0	0.0
Gross External Reserves (Months of Imports**)	≥3 Months	7.5	8.2	5.2	4.6	5.0	5.2	6.4	6.5	4.4	4.2
Number of Criteria Satisfied		4	2	1	1	3	3	4	4	4	3

* (2001 - 2005) based on old CPI, (2006-June and beyond) based on new CPI

⁷This was mainly due to sound macroeconomic management in a bid to restore macroeconomic stability following economic difficulties of 2008 that were exacerbated by uncertainties surrounding the presidential and parliamentary elections of 2008 and the change of government in the early part of 2009.

 $^{ ilde{n}}$ The country is also rebasing its GDP in line with SNA 93 which might significantly improve the fiscal deficit criterion.

digit in 2000 to a spike of 17.6 percent in 2003 (table 3). In 2004 to 2006, the trend decelerated sharply averaging 3.3 percent attributed to a tight monetary policy coupled with an appreciating dalasi. However from 2007 to 2008, though still single digit, inflation accelerated somewhat recording above six percent. In 2009, inflation declined sharply to 2.7 percent attributed to a good harvest coupled with the tight monetary policy stance of the Central Bank. The fiscal deficit/GDP ratio indicated a deficit of 8.3 percent in 2009, well above the four percent ceiling. The major underlying factor that contributed to the widening of the fiscal deficit was the faster growth rate of spending than revenue. The current trend is expected to improve with government's commitment to fiscal restrain as well as its focus to domestic debt management.

The country had consistently achieved this criterion throughout the convergence period with the exception of 2001 to 2003 when a ratio ranging from 30.0 to 76.0 percent was recorded. It is expected that the country will maintain her attainment of this

criterion if current fiscal policy stance of government is sustained. With 4.2 months of import cover in 2009, the country had maintained her performance of achieving a minimum reserve of 3 months since 2000°.

The attainment and sustenance of single digit inflation rate in Sierra Leone as indicated above (table 4) has proved challenging since the commencement of the convergence process. The level of inflation for the past three years was more than the prescribed WAMZ convergence criterion of a single digit inflation rate. emerging from a civil conflict that lasted for 11 years and which ended in 2002, the country has since been restoring public services. 10 Consequently, government fiscal operations have been in continuous deficit for the past ten years. Hikes in particularly, recurrent expenditure and the revenue shortfall due to a low tax collections weakened government fiscal balances. Fiscal deficit/GDP ratio recorded in 2009 was 10.5 percent. This was above the WAMZ-prescribed convergence criterion of 4.0 percent but compares favourably to the past three years¹¹. Sierra

Leone failed to comply with the criterion of central bank financing of fiscal deficit. Although there was a reduction in the net claims on government from the Bank of Sierra Leone, it was insufficient to comply with the WAMZ prescribed bench mark. The performance on the reserves criterion has been satisfactory over the years. The country has always accumulated reserves in excess of the benchmark 3 months of import cover since 2004¹².

The rate of inflation in Liberia, measured on year-on-year over the years (table 5) showed mixed development since 2004 oscillating between single and double digits threshold. In 2009, inflation was single-digit and met the WAMZ inflation criterion. Since 2006, the country has operated on the basis of a balanced cash budget benefiting from donor inflows¹³. With the anticipated issuance of Treasury bill instrument in the next budget cycle, 2010/2011, government could resume borrowing again. This however, is intended at financing infrastructure investment which will enhance the country's competitiveness and future fiscal sustainability¹⁴. Central Bank

Table 4: Primary Convergence Criteria - Sierra Leone

Primary Criteria	Target	2001	2002 Dec		2004 Dec		2006 Dec		2008 Dec	2009 Dec
Inflation (End Period)	Single digit	3.4	-3.1	11.3	14.4	13.1	8.3	12.2	13.2	12.2
Fiscal Deficit/GDP (%) excl grants	≤ - 4%	-16.5	-11.7	-10.0	-8.6	-9.6	-8.6	-5.0	-7.9	-10.4
Central Bank Financing of Fiscal Deficit as % of previous year's tax revenue	≤10%	0.0	0.0	24.3	0.0	0.0	17.9	0.0	0.3	17.3
Gross External Reserves (months of imports *)	≥3 months	2.4	2.7	1.7	3.8	4.0	4.2	5.3	4.3	6.2
Number of Criteria satisfied		2	2	0	2	2	2	2	2	1
(*) In months of imports CIF										

Source: Sierra Leone Authorities and WAMI Staff

⁹The build-up in reserves was on account of substantial official transfers to the country from the World Bank as well as the African Development Bank for the purposes of direct budgetary support.

¹⁰The demand for public services i.e. health, agriculture, education, infrastructure, etc. is far greater than the revenues the authorities are able to mobilize.

¹¹Fiscal restraint will ease pressure on T-bill yields and eventually generate fiscal savings for priority poverty reducing expenditures.

 $^{^{12}}$ The gross external reserves as of December 2009 equivalent to US\$336.3 million, was sufficient to finance 6.2 months of imports.

¹³ The Government is on the verge of reaching the HIPC completion point with the IMF which will secure the relief needed to free resources for development financing.

¹⁴Available data indicate zero percent financing of the government by the Central Bank. The country could sustain performance on this criterion.

financing of government fiscal operations is limited by legislation to a maximum of 10.0 percent of previous year's tax revenue which is consistent with the threshold set under the WAMZ criteria. Currently, the stock of external reserves in Liberia has achieved the WAMZ cut-off of 3 months of import cover¹⁵.

- (5.0) A Common Economic Space and Strategies for Integration in the WAMZ
- (5.1) Benefits to Countries in the WAMZ from a Common Economic Space:

common economic space would foster competition, access to wider market, larger and diversified investment and production, socio-economic and political stability and bargaining power for the countries involved. It can be multi-dimensional to cover the movement of goods and services (i.e. trade), capital and labour, socio-economic policy coordination and harmonization, infrastructure development, environmental management, and reforms in other public goods such as governance, peace, defense and security. The overall gains from the economies of scale of such an arrangement cannot be underscored. Financial sector development and growth within the sub-region can serve as an engine for economic growth in the following ways:

- (i) Diversified source of external finance: In contrast to heavy reliance on sovereign debt and its attendance crisis and official aid flows, which are already shrinking, regional integration, allows access to more diversified source of external finance.
- (ii) Global sharing of local equity risks: In contrast to the syndicated bank lending, international investors can share in the riskiness of local capital markets, especially through equity investments.
- (iii) Reduction of cost of capital for local companies: Regional integration allows for local securities market risks to be shared internationally. Greater sharing of risks in the local capital markets through global holdings of local shares leads to reduction in the cost of capital for local firms. This leads to enhanced liquidity of the local market and capital mobilization by firms in response to the reduced cost of capital.
- (iv) Reversal of capital flight: A common economic space would help to reverse capital flight (often an initial capital inflow and source

of privatization capital). The evidence from other regions, such as Latin America and East Asia, suggests that financial globalization leads to large reversals of capital. Here it is important to recognize that the very measures that retain domestic capital are also those that help reverse capital flight. Given that sub-Sahara Africa experiences the largest share of stock of capital flight (relative to other regions), there is a potential for significant reversal, if the region is sufficiently integrated into the alobal financial economy.

(v) Promotion and validation of capital market institutions: Financial integration in the WAMZ would enhance validation of the credibility of domestic capital market institutions (custodial, clearing, settlement, and brokerage services, information and accounting disclosures, etc. and regulations), as foreign investors demand world-class services. Governments will be under greater pressure to strengthen the rule of law, enforce contracts, and increase the growth of available information in response to international investor demands. Thus, a common space would expose the stock markets to the best practices and standards, and in turn puts pressure for reforms of the local stock markets.¹⁶ This informational

Table 5: Primary Convergence Criteria Liberia

Primary Criteria	Target	2007	2008	2009
Inflation (End Period)	Single	11.7	9.4	9.7
	digit			
Fiscal Deficit/GDP(%) ex cl grants	≤ - 4%	3.8	- 5.0	- 4.2
Central Bank Financing of Fiscal Deficit as % of	≤ - 10%	0.0	0.0	0.0
previous year's tax returns				
Gross External Reserves (months of imports c.i.f)	≥3	0.7	0.7	3.8
	months			
Number of Criteria satisfied		2	2	3

Source: Liberia Authorities and WAMI Staff

¹⁵The performance of Liberia on this criterion is largely linked to inflow from development partners and revitalization of the rubber, mining and agricultural sectors.

discipline has a positive externality over the entire financial sector, including the banking sector. It is, therefore, important that countries in the WAMZ do not put counterproductive restrictions in place by stacking odds against outside investors.

(5.2) Key Constraints to A Common Economic Space in the WAMZ

egional financial integration process in the WAMZ is facing several challenges. With regard to formal integration arrangements; there is a substantial gap between the aspirations expressed in the treaties and the reality on the ground. The reasons are manifold but are usually attributed to lack of commitment towards enhanced integration which results in lack of supranational authority and weak regional coordination

The constraints inhibiting an integrated sub-region are discussed under the following sub-headings:

Macro-economic and Political Instability

Abrupt changes in the economic and political landscape of the region are major source of instability. High macro-economic and political instabilities within the WAMZ have lead to high volatility in the financial markets. Unfortunately, Africa is abundantly endowed with abrupt changes in government policies and political climate. These abrupt changes have adverse consequences in financial markets.

Inadequate Political Commitment

This is one of the most serious constraints to integration. There has been inadequate practical political will to effectively implement agreed programmes for economic integration. This is evident with a number of regional

protocols, which have not been ratified for years in several Member States due to fear of the short-term political and economic problems.

Foreign Exchange Fluctuation

High currency exchange volatility is endemic to the region, creating an impediment to foreign investments. In view of the dearth of hedging mechanisms through derivative markets (forward, futures, and options), an indirect approach would be to increase the number of export-oriented companies on the stock exchanges.

Small Financial Market in the Region

Financial services in the WAMZ tend to be more limited in scope, more expensive, and of poorer quality. In some cases, there are too few institutions to make the market competitive and the institutions themselves are often too small to achieve economies of scale. Furthermore, the financial systems are more volatile because they have fewer opportunities to diversify their risks either geographically or by sector.

Lack of Financial Deepening and Credit to the Private Sector

The performance outcomes for the financial sector reforms have been discouraging or at times outright perverse. The desired effects on savings mobilization and credit allocation have not materialized. The financial deepening measures and the measures of private credit, the private credit/GDP ratios, have not show clear upward trend in the region.

Banking Instability and Dysfunctional Intermediation

The problems of the banking systems in the WAMZ remain severe after financial sector reforms. Many economies are characterized by banking systems with a heavy concentration of their assets in the short end of the market and excessive liquidity (Nissanke and Aryeetey 1998). Moreover, the portfolios of banking institutions continue to be dominated by an extremely high incidence of non-performing loans and excess liquidity. Such a weak banking system breeds instability and even undermines government policies, such as the conduct of monetary policy (Camen, Ncube, and Senbet 1996).

Banking Incentive Issues and Illdesigned Safety Nets

The size and scope of financial service activities in the region is limited by policy. Absence of correct incentives is visible within the region. The lesson for the region is to devise efficient and incentive compatible regulatory systems. This could be in form of provision of safety nets, such as explicit or implicit deposit insurance schemes.

Supervisory and Regulatory Failure

Supervision and regulation of the financial sector have remained grossly inadequate, and the quality of financial intermediation is either reflective of excessively high risk (leading to bank distress) or excessively conservative (leading to dearth of credit to the private sector). This requires a well developed and coherent legal environment that forces regulators to faithfully and obediently implement and enforce regulation.

(5.2) Strategies for Integration

- t is generally accepted that common economic space increases economic growth and improves welfare provided that two conditions are satisfied:
- (i) Bigger firms are created in the sectors exhibiting economies of scale and/or scope; and

¹⁷The focus on the development of the banking sector precludes opportunities for building up informational technology unique to risk capital (e.g., disclosure and accounting standards).

(ii) Competition is strengthened across the integrated area.

Financial systems development and opening within the context of a single economic space would amongst others, facilitate migration of capital in the long-run and cross-border financing of current account imbalances in the short-run, thereby reducing the costs of adjustment to shocks to demand and supply. Furthermore, it would allow extensive sharing of the risks associated with macroeconomic shocks across countries as it broadens the range of diversification by including foreign bonds and equities in individual portfolios. In view of the thrust of financial liberalization that has been directed to market opening recently, greater capital mobility through capital account liberalization and opening of financial services industries is designed to strengthen financial ties between individual countries, thereby promoting creation of integrated regional financial markets in the sub region. If this development indeed takes place, the West African Monetary Zone countries would be closer to monetary integration (Economic and Financial) than before.

Strengthening Domestic Financial Markets

The first prong of the strategy for achieving national aspirations should focus on strengthening the domestic financial markets. The strengthened financial sector shall be used as a catalyst to drive growth in the real sector.

Enhancing Integration with External Financial Markets

The second prong of the strategy focuses on enhancing integration with external financial markets, concurrently with strengthening the domestic financial markets. The plan is to focus on initiatives that would enable the financial sector to reinforce the expansion

of Nigeria's export base. Simultaneously, it is also planned to adopt initiatives that support exchange rate stability and create an environment that attracts foreign direct investments (FDI) as well as drives integration with external markets. The integration with external markets should commence with the regional bloc and later expand to other global economic blocs.

Building Financial Infrastructure

Financial sector infrastructure comprises the framework of laws. regulations, supervision, and institutions which underpin the operation of financial markets. The strength of financial markets rests on the strength of their supporting infrastructure, and distortions and imperfections in infrastructure can consequently impede and distort the effective functioning of markets. The five key components of financial sector infrastructure to be addressed are: regulation, supervision, and financial reporting standards; securities markets; payments systems; the legal framework; and, the availability of credit information.

Full Adoption of Basel II and Implementation of International Financial Reporting Standards (IFRS)

The way forward for WAMZ countries is to agree on a regional reform agenda with benchmarks and a timetable for harmonizing prudential regulations, supervisory processes and practices such as:

- Financial institutions supervised on a fully consolidated basis to inhibit the scope for regulatory arbitrage
- Capital requirements tightened and allowing for liquidity risks
- 3. Agree on a tracking system to monitor progress and compliance with benchmarks

- 4. Decide on the objectives and responsibilities as well as the detailed institutional arrangements and set up a working group to develop those detailed instructions into a draft law
- 5. Set up working groups to:
 - (i) develop a system for monitoring and control of market and other risks;
 - (ii) streamline prudential limits and ratios;
 - (iii) study the feasibility of a common accounting and reporting system; and
 - (iv) define a process of early consultations and search for commonality among supervisors before issuing any new legislation, regulations, guidelines, directives or manuals, including the establishment of a legal sub-working group.

Statistical and Data Development

Build capacity for member countries to migrate to System of National Accounts 93 (SNA 93), Balance of Payments 5 (BP5) and other recent formats of monetary and fiscal statistics. Furthermore, provide key statistical base for WAMZ monetary union to do the following:

- a. harmonizing the CPI and SNA framework:
- b. a harmonised Regional Consumer Price Index for the WAMZ
- c. an electronic database and data exchange system (real time).

Regulation and Supervision Reforms

The legal and regulatory basis of financial supervision supporting integration within the WAMZ should focus on the core components of all financial supervisory standards. The components should consist of the following categories:

• Regulatory governance,

which refers to the objectives, independence, enforcement, and other attributes that provide the capacity to formulate and implement sound regulatory policies and practices;

- Prudential framework, which refers to internal controls and governance arrangements to ensure prudent management and operations by financial firms; and
- Financial integrity and
 s a f e t y n e t
 arrangements, which
 refer to
 - (a) The regulatory policies and instruments designed to promote fairness and integrity in the operations of financial institutions and markets; and
 - (b) The creation of safeguards for depositors, investors, and policyholders, particularly during times of financial distress and crisis.

Developing a Supportive Regulatory Infrastructure

The need to increase financial sector competition in order to reduce costs and increase access implies the development of more flexible and uniform harmonized regulations and reporting requirements and uniform accounting standards conforming to IFRS. This would provide regulatory and supervisory cost reductions for institutions operating on a "virtual region" basis. Thus, it will improve the stability of each participating country's financial system by providing regulators with access to information about institutions' activities in other countries.

(6.0) Conclusion

(6.1) Summary

hile the effects of the world financial crisis on countries in Africa continue to evolve, it has been observed that some African financial sectors have shown resilience in withstanding the effects of the crisis, benefiting from high capitalization and liquidity levels. The early effects of the crisis were evident in reduced capital inflows, with major markets such as Nigeria and South Africa experiencing larger net outflows than inflows. The higher net outflows increased demand for the dollar and other hard currencies, leading to the depreciation of several African currencies¹⁷. While some measure of recovery has since taken place in 2010, equity markets have seen substantial falls¹⁸. However, the credit crunch and increased risk aversion around the world have led to severe difficulties for the WAMZ in both trade financing and obtaining long-term funding in international markets at reasonable cost, as shown by the considerable widening of bond spreads since late 2007. Despite world-wide economic slowdown, the pace of economic activities in the WAMZ member countries remained relatively stable, although slower than in the previous years. Real GDP growth rate was estimated at an average of 5.8% in 2010, 5.5% in 2009, compared with 6.4% in 2008. The growth was underpinned by activities in the agricultural and services sectors in member countries.

In common with much of the rest of developing world, the sub region has very large needs for finance for infrastructure in the areas of transport, energy generation, and energy distribution. Normally, these needs

would be met by using multilateral financing to supplement domestic budgetary resources. Lessons of experience have shown that strong political commitment at the highest level, coupled with the implementation of sound macroeconomic policies on sustained basis represent the necessary and sufficient success factors for the creation of monetary and economic unions, globally. A number of specific problems which have reduced the benefits of financial integration have been identified. Understanding the impact of financial development on economic growth and assessing the development of the financial sector in the WAMZ requires good measures of financial development.

(6.2) Conclusion

n conclusion, the financial sector of the WAMZ is relatively shallow, as evidenced by the current broad money to GDP ratio of less than 30 percent, vis-à-vis an average of 50 percent for Africa. Lessons of experience have shown that strong political commitment at the highest level, coupled with the implementation of sound macroeconomic policies on sustained basis represent the necessary and sufficient success factors for the creation of monetary and economic unions, globally. Evidence from other regional groupings suggest that expanded trade, macroeconomic stability, measured by: low rate of inflation and exchange rate stability, sustained growth and narrowing of fiscal balance, have become more entrenched in the regional groupings that have firmly established their economic and monetary union arrangements. The WAMZ needs both the intermediaries and the financial markets to support its development agenda. Both

¹⁶Remittances were estimated to have declined between 4.6% and 7.8% during 2009.

¹⁷Merrill Lynch Africa Lions Index, which accounts for 15 African countries, experienced a 70 percent drop in the March-December 2008 period.

market and intermediary-based systems have their own comparative advantages. Financial markets are better at financing new technologies and projects where there is little agreement on the management of firms, while intermediaries have developed expertise to distinguish between bad and good projects, making them very effective at mitigating moral hazard and adverse-selection problems between lenders and borrowers¹⁹ Countries in the region should therefore focus their attention on legal, regulatory and other policy reforms that encourage the proper functioning of both financial markets and intermediaries to support their long-term development agenda.²⁰

It is our belief that there are good economic arguments for suggesting that the financial sector might generate important gains in terms of growth and social welfare, in effectively promoting a single economic space in the sub region. Financial sector development in the region is needed in facilitating economic integration, growth and poverty reduction. Evidence from Europe has shown that. An adequate and harmonized regulatory and

institutional arrangements and an adequate supervisory framework should amongst others form the building blocks.

Finally, a certain degree of economic coordination as a step towards macroeconomic stability is also crucial in order to avoid financial crises that would hinder effective economic integration. In this respect, maintaining sound public finances and having a monetary policy geared towards achieving price stability are of the utmost importance as well as balancing financial innovation and economic stability.

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¹⁹However, the quantity and quality of financial services are very important.

²⁰While there are obvious advantages to be derived from the integration of the financial markets, proper balance needs to be struck on how foreign financial institutions are allowed to operate in national markets.

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INTRODUCTION

overeign wealth fund (SWF) is a state owned investment fund composed of financial assets such as stocks, bonds, property, precious metals or other financial instruments and invested globally. When a country, by running a current account surplus, accumulates more reserves than it feels it needs for immediate purposes, it can create a sovereign fund to manage those "extra" resources.

Sovereign funds have existed since the 1950s, but their total size worldwide has increased dramatically over the past 1015 years (Johnson 2007). Kunzel, et al (2010) defined SWF as special investment fund created or owned by governments to hold foreign assets for long-term purposes. In recent years, SWF has witnessed remarkable rise to prominence in the international financial landscape. The largest holders of SWF include, Abu Dhabi Investment Authority,

NIGERIAN SOVEREIGN WEALTH FUND (SWF): LESSONS FROM EXISTING SWF²¹

Norway's Government Pension Fund-Global, Kuwait Investment Authority, and China Investment Corporation. Collectively, SWFs managed assets are in excess of US\$5.0 trillion. Although many suffered losses during the 2008 alobal financial and economic crises, SWFs managers have become important players in worldwide portfolio investment, especially in the wake of the crisis when they took stakes in companies as prominent as UBS, Citigroup, Morgan Stanley, Merrill Lynch, Barclays, Blackstone, Standard Chartered, and the Carlyle Group (Afyonoglu et.al 2010).

It is generally agreed that although SWF is not a new phenomenon, it has attracted much public debate in recent years owing to its increasing role in the global financial markets. The growth of these funds is part of the larger accumulation of foreign exchange assets by developing countries. Decades ago, funds were established by governments as commodity price stabilization funds as insurance against instability in price volatility especially in crude oil. sustained increase in oil prices in recent years, these funds have changed from 'Stabilization Funds' to 'Sovereign Wealth Fund'. The main endeavor of SWF in all countries is to smoothen the short and medium-term fluctuations, and promote domestic economic stability. The Funds are set aside to maximize returns on investment and long-term goal of creating a pool of wealth for future generation. Currently, over half of global sovereign wealth funds are in the hands of oil exporting countries which include Saudi

Arabia, Algeria, Libya and Kuwait.

In this regard, the initiative by Nigeria towards the establishment of a SWF with the aim of safeguarding the country's resources for future generations and building a robust institutional framework for strong fiscal policy and management of excess crude earnings, is a welcome idea. Since the discovery of crude oil deposits in the late 1950s, Nigeria had made several attempts to put aside surplus receipts arising from crude oil price increase. The most recent being the excess crude account (ECA) which was created in 2004 to enable the country save for the future and also stabilize fiscal operations, particularly deficit that could result from adverse oil price shocks. Although the present SWF is similar to the ECA, the initiative accords it legitimacy rather than being a product of political and economic expediency. The fund has a seed capital of US\$1.0 billion. Currently, Nigeria is the only member of the Organization of Petroleum Exporting Countries (OPEC) without a SWF.

This paper would examine the merits and demerits of some existing SWFs with the view of drawing some lessons of experience for Nigeria to establish its own SWF. To do that, following this introduction, the paper in section two would outline the objective of SWF, section three discusses the merits and demerits of SWF, while section four examines countries experiences and section five dwells on the institutional framework for the provides fund and section six policy recommendation.

²¹The views expressed in the paper are those of the author and do not in any way represent the official position or thinking of the Central Bank of Nigeria. The author acknowledges the comments and criticisms of anonymous reviewer.

2.0 Objectives of Sovereign Wealth Fund (SWF)

he prime objectives of creating SWF are economic and strategic in nature. It is created when governments have budgetary surpluses and have little or no external debt. It is not always possible or desirable to channel excess liquidity or surpluses into immediate consumption. Therefore, SWF is created as store of wealth for future generations so that they can benefit from the resources after their depletion. The fund is also a mechanism designed to reduce the impact of volatile fiscal revenues and/or foreign exchange receipts, linked to the pro-cyclical pattern of export prices or volumes.

Generally, there are two types of SWF: saving funds and stabilization funds. Stabilization SWFs are created to reduce the volatility of government revenues, to counter the boom-bust cycles' adverse effect on government spending and the national economy. It is believed that SWF in resource rich countries can help avoid resource curse. Generally, sovereign wealth funds are held solely by central banks, which accumulate the funds in the course of their fiscal management of a nation's banking system and are usually of major economic and fiscal importance. Other sovereign wealth funds are simply the state savings which are invested by various entities for the purposes of return on investment which may not have significant role in fiscal management. Generally, when states institute SWF, they also put in place well defined rules for investment and withdrawals from the Fund as it matures from the initial stabilization objectives. Countries with high levels of foreign reserves are no longer contented with low returns offered by international banks. example, the Singaporean SWF declared its desire to "achieve good long term returns" on "Singapore's foreign reserves". China diverted its foreign currency

reserves from the Central Bank to provide the China Investment Corporation (CIC) with \$200 billion to start its sovereign wealth fund. Nowadays, states use their sovereign wealth fund as a means to diversify their economies and improve their human capital.

Most countries explicitly or implicitly state as an objective, investment of their SWF in the domestic or regional economy. States may use their SWF to make much needed infrastructure investments while others use theirs to restructure their economies to specialize in a particular area. For example, states such as Abu Dhabi and Qatar with large per capita sovereign wealth restructured their cities into large financial service centers importing specialized financial talent from and around the world. Others focus more on the diversification of their economy away from a commodity dependent economy. Sovereign wealth funds have also been increasingly professionalized, importing world class talent to improve the quality of financial management and domestic human capital. These days, countries are no longer contented to park financial capital in assets that earn a negative real return in foreign markets.

According to the Sovereign Wealth Fund Institute (2009), countries that have created SWF globally include United Arab Emirates (US\$ 627 billion), Algeria (US\$56.7 billion),Libya (US\$70 billion), Kuwait (US\$202.8 billion), Venezuela (US\$0.8 billion, Saudi Arabia (US\$439.1 billion), Iran (US\$23 billion) and recently Angola (N/A). Other countries that have substantial investment through SWF are Norway (US\$512) billion) and China has three corporations where its fund is invested. These corporations are the State Administration of Foreign Exchange (SAFE) Investment Company established 1997 with (US\$347.1 billion), the National

Social Security Fund established in 2000 with (US\$ 146.5 billion) and the China Investment Corporation established in 2007 with (US\$ 332.4 billion). The three corporations' cumulative fund stood at (US\$826.0). The Chinese SWF has its origins from non-commodity exports and invested in a variety of asset classes in developed and emerging markets. Significant investments have been made in the UK equity market with top holdings in Royal Dutch Shell, Rio Tinto, BG Group, Tesco, BHP Billiton, and Barclays. Other areas of Chinese investment through its SWF include hedge funds, futures, sovereign debt, corporate debt and real estate.

3.0 Merits and Demerits of SWF

3.1 Merits of SWF

rom economic perspective, countries that promote SWF have a valuable tool for achieving certain public policy and macroeconomic goals including infrastructural development. The movement of capital around the world with unregulated ease can contribute to rapid productivity growth and a global boom. Significantly, SWFs are established for four principal reasons. Firstly, they are created as an inter-generational fund transfer mechanisms, whereby future revenues are guaranteed by today's earnings. When a country's natural resources are exhausted, future generations can continue to live prosperously using the earnings of their forefathers. Next, most sovereign wealth funds are created to diversify a country's income so that it can respond to shocks to the country's comparative advantages. When a country is faced with a competitiveness crisis, it can call on its sovereign wealth fund assets to reinvest in new sectors of the economy that can revive the country's competitive advantages. Thirdly, countries establish sovereign wealth funds to increase the return on assets held in their central bank reserves. By

investing in other sectors than U.S. or European sovereign bonds, they can raise returns above the 3-5 per cent annual returns acquired by most foreign reserve holdings. The rapid rise of SWFs has undoubtedly brought a number of benefits including as a source of capital against the backdrop of the current financial crisis to number of financial institutions.

As argued by Curto (2010), in the next decade, SWFs would have the potential to boost global wealth by helping recycle large savings in budget surplus countries toward more productive investments, particularly in the developing countries. Over the medium term, many developing countries will continue to depend on external savings to finance critical investment. On the supply side, major fiscal stimulus packages in advanced economies are likely to result in a general re-pricing of sovereign debt risk and the associated cost of borrowing; and in more limited access to and a crowding-out of credit for developing-country borrowers, forcing some of them into fiscal austerity if they do not find alternative resources. In this context, SWFs could bridge the gap between the growing investment needs and the reduced supply of external resources, thereby sustaining growth, accelerating progress towards the Millennium Development Goals, increasing economic integration, and helping build the foundations for a multi-polar world. Africa, in particular, may benefit most from SWFs' resources, given its relatively weak starting point in trade, regional integration, infrastructure, and private sector development.

In particular, SWFs rapid development reflects the significant shift of emerging economies from world's debtors to world's creditors. Indeed as from 1999, the emerging world as a whole began to run a current

account surplus and export capital to the rest of the world as well as accumulating foreign assets. When the level of such assets outstripped the level of reserves needed for stabilization purposes, it became reasonable to try to increase returns on investment by diversifying investments from traditional government debt securities. SWFs are being accumulated rapidly and being invested more actively, buying stakes in western companies with the aim of reducing the impact of volatile oil and other commodity prices on government revenues, balance of payments and savings for future generations.

3.2 Demerits of SWF

he first major criticisms of SWFs deal with their effectiveness. As shown by a 2007 IMF study on sovereign wealth funds in natural resource-exporting countries, there is little evidence to show that sovereign wealth funds have achieved the goal of "smoothing out" liquidity, government expenditures, and pension obligations between times of strong and weak natural resource prices. Furthermore, the IMF reported that countries possessing SWFs found it difficult to coordinate fund operations with fiscal policy, where investments by companies held by SWFs did not occur in concert with government programs. Very few SWFs have ever been asked to draw down their holdings for the greater, "national" well being, and, in general, the IMF found that SWFs acted as independent bodies, disconnected from their governments. The IMF in the study found an interesting paradox in the relation between SWFs and their home countries that, the more reliant a country is on one commodity, the less effective its SWF is in achieving its goals. Secondly, another major criticism of sovereign wealth funds as discussed by Balin (2008), is that their goal of building a financial base that can be used to respond

to shocks in comparative advantages is misguided. He argued that, it makes much more sense to invest now to diversify a country's economy and protect against possible comparative advantage shocks than to create an "endowment" to rebuild an economy once a shock occurs.

4.0 Countries Experiences Norway

he Norwegian SWF provides an excellent opportunity to systematically evaluate the performance of one of the largest Sovereign Wealth Funds. Norges Bank Investment Management (NBIM) was formed in 1998 as a separate agency within the Norwegian central bank (Norges Bank) responsible for investing its SWF assets. It evolved from the Petroleum Fund that was established in 1990, now the Government Pension Fund-Global. Fundamental purpose of the Norwegian fund is to allow Norwegians to smoothen their pattern of spending relative to the volatile pattern of the nation's oil revenue. The goal of its fund is maximum income subject to a level of risk and portfolio specified by the Ministry of Finance. The Norwegian government has acknowledged the transitory nature of oil with its production declining steadily since 2001 and prices have been erratic. The Fund was first authorized to invest in equities in 1998, and the allowable equity share was increased from 40 to 60 per cent in 2007. The Fund was authorized to hold nongovernment bonds in 2002 and real estate and private equity by April 2008. Accountability is insured by requiring that the Fund's actual portfolio remains close to a benchmark specified by the Finance Ministry, Fund Management regularly meets and compares the performance of portfolio managers with the benchmark to ensure that fund managers are not taking excessive risk on investments.

To achieve transparency, the NBIM publishes quarterly and annual reports. The NBIM hires both external and internal portfolio managers and detailed management expenses are reported regularly. External managers are identified by firm and responsibility (equities, fixed income, region, industry) and they are compensated on the basis of performance. Employees are not exclusively Norwegian nationals, and the Fund has offices in London, New York and Oslo. The actual performance of the Fund is as result of decisions of many individual portfolio managers operating within general guidelines set by the government.

United Arab Emirates (UAE)

The UAE has one of the largest Sovereign Wealth Fund (SWF) in the world with over US\$620 billion under management of the Abu Dhabi Investment Authority (ADIA). Founded in 1976, the source of the fund is primarily from the oil wealth of the Emirate of Abu Dhabi. According to ADIA's 2009 Review, ADIA's sole mission is "to invest funds on behalf of the Government of the Emirate of Abu Dhabi to make available the necessary financial resources to secure and maintain the future welfare of the Emirate". A robust and discerning investment powerhouse, highly sought after in fund investor portfolios, ADIA is a truly global operation with only 30.0 per cent of its 1,200 staff from the UAE, 36 per cent from Asia and 12 per cent from Europe. ADIA does not invest in the UAE or Gulf region. With a substantial SWF and a gross national income (GNI) per capital of \$11,906, Emirate of Abu Dhabi can afford not to invest in their region. UAE's investment of its SWF had helped build its capital, Abu Dhabi, which is the second largest city in the emirates. The city is currently counted as one of the most progressive ones in the entire world. Until the mid 20th century, the economy of Abu Dhabi was maintained by camel herding and

production of dates and vegetables. Fishing and pearl diving were also engaged during summer time. However, things changed completely after the city struck oil, in the year 1958 and gained independence in 1971.

Kuwait

Kuwait's SWF is probably the oldest sovereign fund in the world with the objective of transferring nonrecurring oil revenue into a diversified portfolio to create a social stability in the country. 1953 the Kuwait Investment Authority (KIA) established the Kuwait Investment Office in London in order to invest oil revenues and reduce Kuwait's reliance on oil. In Kuwait 10.0 per cent of all state revenues are transferred annually to the Future Generations Fund, including 10 percent of the income generated by the General Reserve Fund. By 1986, government revenue from investments exceeded oil revenue. The KIA is a governmentowned corporation responsible for managing the sovereign wealth fund of Kuwait created in 1953 to create a fund for future use and lessen the country's dependence on its oil reserves. The source of the money for the sovereign wealth fund is derived primarily from the excess proceeds from Kuwait's oil reserves. The fund is divided into General Reserve Fund and the Future Generations Fund. According to the Sovereign Wealth Fund Institute, the Kuwait Investment Authority controls the seventh-largest sovereign wealth fund in the world, with approximately \$202.8 billion in assets under management. Kuwait Investment Authority was instrumental in rebuilding the Kuwaiti economy in the aftermath of the Iraqi invasion of the country which sparked the 1990 Gulf War. The combination of increased stability, increased returns, and greater economic power through the concentration of its finances makes the creation of an SWF an appealing policy for such powers.

China

China provides another classic example of SWF. For many years, China's rapid export growth has caused it to accumulate an evergrowing reserve that reached US\$1.5 trillion by 2007. As a consequence of the rapid increase within the last decade, the government established its sovereign wealth fund, the China Investment Corporation (CIC) on September 29, 2007 with US\$200 billion in initial capital. The CIC is one of the largest sovereign wealth funds (SWFs) in the world. investments by the CIC are commercial based, seeking to maximize return on investment. Since its creation, the CIC and its subsidiaries have made several investments, including the purchase of 9.9 per cent of the U.S. financial firm, Morgan Stanley in 2007. The CIC was created to improve the rate of return on China's \$1.5 trillion in foreign exchange reserves and to soak up some of the nation's excess financial liquidity. China's economy is rapidly growing and coupled with its foreign exchange reserve and the large SWF, China saves today to consume even more in the future. Its high savings rate reflects what economists call "precautionary saving" against a downturn. The CIC is a semiindependent, quasi-governmental investment firm established by the Chinese government to invest a portion of the nation's foreign exchange reserves. The CIC reports directly to China's State Council, conferring it with the equivalent standing of a ministry.

5.0 Institutional Framework and Governance Structure of SWF

ased on generally accepted principle and practice (GAPP) - the Santiago Principal document (2008), the institutional and governance framework for the SWF should be sound and establish a clear and effective division of roles and responsibilities in order to facilitate accountability and operational

independence in the management of the SWF. Regardless of the specific governance framework, the SWF's operational management should be conducted on an independent basis to ensure its investment decisions and its operations are based on economic and financial considerations consistent with its investment policy and objectives as well as free from political influence or interference. The governance structure should be set out with legal framework through relevant legislation, charter or other constitutive documents. It should ensure appropriate and effective division of oversight, decision making, and operational responsibilities. However, a number of SWFs are established as separate legal entities with clear governance structure while others are established as pools of assets without separate leaal personality. The owner may exercise the functions of the governing body through one or more of its organizational units (e.g., a ministry, a parliamentary committee, etc.). In such case, it is important that there should be a clear distinction between the owner/governing body and the agency responsible for the operational management of the SWF. For example, the operational management of the SWF could be delegated to an independent entity or a separate statutory agency.

6.0 Conclusion and Policy Recommendation

enerally, SWFs are established as interaenerational fund transfer mechanisms to diversify a country's income and to increase return on assets held in central bank reserves. Based on survey of some countries experiences such as in Norway, UAE, Kuwait and China, SWF provides an excellent investment opportunity. For example, the Norwegian Norges Bank Investment Management (NBIM) was formed in 1998 with the responsibility of investing Norwegian SWF assets. The fundamental purpose of the Norwegian fund is to allow Norwegians to smoothen their pattern of spending relative to the volatile pattern of the nation's oil revenue. The goal of its fund is maximum income, subject to a level of risk and portfolio specified by the Ministry of Finance. Similarly, UAE has one of the largest SWF in the world with over US\$620 billion under management of the Abu Dhabi Investment Authority (ADIA) founded in 1976. UAE's investment of its SWF has helped build its capital Abu Dhabi which is the second largest city in the emirates. The city is currently counted as one of the most progressive in the entire world. Until the mid 20th century, the economy of Abu Dhabi was maintained by camel herding and production of dates and vegetables. Kuwait is another country whose SWF is probably the oldest in the world founded in

1953. In Kuwait 10.0 per cent of all state revenues are transferred annually to the SWF, including 10.0 percent of the income generated by the General Reserve Fund. By 1986, government revenue from investments in the SWF exceeded oil revenue. Kuwait SWF was instrumental in rebuilding the Kuwaiti economy in the aftermath of the Iraqi invasion during the 1990 Gulf War owing to increased stability, increased returns, and greater economic power.

Surely, the current initiative by Nigeria to establish a SWF is a welcome idea and a valuable tool for achieving certain public policy and macroeconomic goals. With the current economic downturn, establishment of SWF is an elegant idea but we need to know a lot before we rush to embrace its establishment. There is the need to have strong institutional arrangements with rules and regulations on how the fund would be utilized, borrowed and where to invest. There has to be a well structured regulatory and oversight structures in place and transparency. Any disbursement, withdrawal or appropriation of the fund should be in strict compliance with the provisions of the bill governing its establishment. Appointment to the fund management should be based on technical expertise not on the basis of political, ethnic, or other partisan considerations.

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INTRODUCTION

he growth of Asia was a transforming event in the economic history of the second half of the twentieth century. East Asia's economic performance over the past three decades by far outweighed all other regions of the world. The average growth rate exceeded that of other regions put together by 1.7 per cent annually. Most Asian economies benefited from this success story (figure 1).

The first are China and Japan, followed by the "Tigers": South Korea, Singapore, Hong Kong and Taiwan, then the newly industrializing countries of Thailand, Malaysia and Indonesia, followed most recently by India. All East Asian countries have achieved high rates of growth for at least two decades. Similarly, the shares of East Asian countries in global trade have risen sharply from 14.1 per cent in 1953 to 24.1 per

STRATEGY FOR ECONOMIC DEVELOPMENT IN SOUTH KOREA: LESSONS FOR NIGERIA

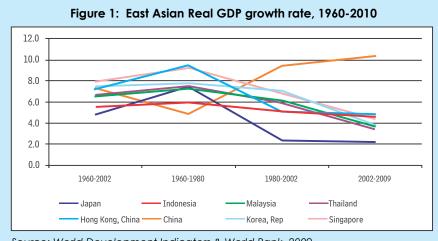
cent in 2002 and 29.3 per cent in 2010²³. Over the last forty-five years, Korea has been one of the impressive performers in this outstanding group.

These growth rates have unquestionably increased the relative importance of these countries in the alobal economy (figure 2). For instance, Korea expanded its share of global income more than four and a half times between 1990 and 2009. Her GDP per capita was only US\$82.0 in 1962, stood at US\$16,000 in 2005 and exceeded US\$30,200 in 2010(CIA, World fact book). The country is now the fourth largest economy in Asia (after, Japan, China and India) and the twelfth largest in the world (Economy watch, 2010). Her export-led growth provided the basis for rapid and sustained economic growth, such that by 2005 the country became the world's eleventh largest exporting nation and thirteenth largest importing nation in the world (CIA, 2005).

The economic condition in Korea in the 1950s was worse than

Nigeria: a largely rural peasant economy, outrightly without natural resources. It has the highest density of people on arable land in the world. Exports were just about 3.0 per cent of GDP, 88.0 per cent of which were primary products. It depended mostly on foreign aid transfer for more than 10.0 per cent of her GDP and it was the third poorest country in Asia. Her GDP per capita was comparable to any poor country in both Africa and Asia in the 1960s. Although like Nigeria in the 1960s, but relatively worse, the country was devastated by civil war in the early 1950s (Economy watch, 2010).

The Nigerian economy within this period had a relatively brighter prospect of development than Korea. Nigeria's rate of economic growth approximated 5.0 per cent per annum and around 1966 the country became the world's tenth largest exporter of petroleum in the world (Carl, 1967), but all efforts made so far to develop the country have failed. In this paper, the factors that accounted for speedy growth of



Source: World Development Indicators & World Bank, 2009.

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²³estimate

the Korean economy are examined, while some useful lessons were drawn for Nigeria.

The paper is organized into six sections. After this introduction, section two presents an overview of Korea's economic development, section three looks at the success factors. Section four examines the emerging challenges while section five draws some lesson for Nigeria from the Korean experience and section six concludes the paper.

2. Overview of Korea's Economic Development

ccording to Tairu (2006), from the period of liberation of Korea in 1945 to date, the country's growth experience can be categorized into six different stages, namely: reconstruction period (19451960), the period of export-led boom (1961-1972), the period of crisis (1973-1983), period of reformation

(19841995), period of slowdown and restructuring, 1997-2005 and the period of global downturn and quick rebound (2006-2009).

Reconstruction Period

After the country's independence in 1945. Korea's major task was that of survival as a nation. This was because the country had acute shortage of natural resources, grossly insufficient domestic market, scarcity of managerial manpower and raw materials. Manufacturing was undergrowing. For instance, in 1948 it was just about 15.0 per cent of its level in 1939 (Kim and Roemer, 1979). During the Japanese rule, the ownership of capital was heavily concentrated in the hands of the Japanese who lived in Korea. Also, between 1950 and 1953 the country witnessed a civil war which further damaged the economy. The country lost about one and half million people during the war and over 30.0 per

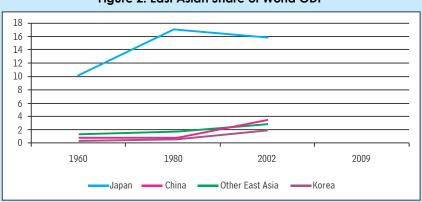
cent of capital stock was destroyed. After the war, there were immense efforts to rebuild the country. The country embarked on protectionist trade policy and Import Substitution Strategy (ISI) with huge investment in education (figure 3). In 1953, government began to give preferential treatments to some selected industries by allowing them to borrow funds from banks at preferential rates and purchasing foreign exchange at concessionary rate. Domestic currency was over-valued and imports highly restricted by high tariffs and imports licensing systems. Within this period exports were insignificant, amounting to just about 3.3 per cent of Gross National Product (GNP). More so, most of the exports were primary commodities such as agricultural and fishery products as well as minerals ores, with no value addition. The country relied massively on foreign aid. It was estimated that within this period the foreign aid financed more than 70.0 per cent of total imports and contributed about 95.0 per cent of foreign savings (Collins & Park, 1989).

The economy began to improve in 1954 as GDP growth rate rose to about 4.1 per cent, although due to large population, per capita income grew only by 0.8 per cent and inflation was alarming. For instance, few months after the liberation in 1945, the Seoul wholesale price index soared 1600 per cent due to extreme social and political unrest (Jong-Wha Lee, 2006). During the period 1954-1961, annual wholesale inflation rate averaged 14.3 per cent.

Period of Export-Led Boom

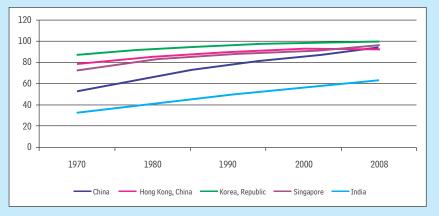
The country's unequaled period of economic growth started in the early 1960s. This period witnessed the establishment of growth and development strategy that resulted in a remarkable transformation of the economy that catapulted Korea to the status of Newly Industrializing Country

Figure 2: East Asian Share of World GDP



Source: World Development Indicators, 2009.

Figure 3: Adult Literacy Rates, 1970-2008



Source: World Development Indicator, 2009

(NIC) by 1970. During this period, government policy shifted away from ISI towards export orientation. General Park Chung Hee, who overthrew the government of the second republic in May 1961, demonstrated his commitment to economic development. He carried out comprehensive, effective and efficient trade reforms as well as export promotion policies. In 1964 the domestic currency was devalued by about 100.0 per cent against the US dollar. This eliminated the bias against export industries. Interest rates were reformed in favour of high domestic savings. The government established specialized banks and nationalized some of the existing commercial banks. Importation was further liberalized to accommodate more capital and raw materials required for production of exportable goods. Extensive direct export incentives such as: tax exemption, wastage allowance and export credit at preferential rates were introduced. This aggressive export drive culminated into rapid growth and structural changes. GNP began to grow at an average rate of 8.7 per cent. The share of mining and

manufacturing sector in GDP rose to an average of 20.8 per cent between 1962 and 1973 from an average of 14.1 per cent between1954-1961, while that of agricultural sector fell to 32.7 per cent from 40.9 per cent within the same period (table 1).

During the 1962 1973 period, the real value of total exports increased by 29.7 per cent, per annum. Eventually, the share of exports in GNP rose sharply from an average of 3.3 per cent between 1954 and 1962 to 13.8 per cent between 1962 and 1973. Remarkably, this impressive growth of exports was accompanied by changes in composition, as the share of industrial exports increased significantly from 27.0 per cent in 1962 to 86.0 per cent in 1973. Although, inflation rate measured by Consumer Price Index (CPI) recorded double-digit growth throughout this period, it was fairly low, averaging 12.3 per cent between 1962 and 1973(Jong-Wha Lee, 2006).

Period of Crisis

In the early 1970s Korean government became increasingly worried about the declining

1954-61	1962-73	1974-82	1983-92
4.1	8.7	7.1	9.1
11.5	18.9	12.7	11.8
0.8	6.4	5.5	8.0
40.9	32.7	19.9	10.3
14.1	20.8	28.7	30.7
45.1	46.5	51.3	59.0
10.2	29.7	13.0	11.8
3.3	13.8	31.6	34.9
10.5	19.8	29.8	32.4
0.2	-4.0	-5.3	1.2
	4.1 11.5 0.8 40.9 14.1 45.1 10.2 3.3	4.1 8.7 11.5 18.9 0.8 6.4 40.9 32.7 14.1 20.8 45.1 46.5 10.2 29.7 3.3 13.8 10.5 19.8	4.1 8.7 7.1 11.5 18.9 12.7 0.8 6.4 5.5 40.9 32.7 19.9 14.1 20.8 28.7 45.1 46.5 51.3 10.2 29.7 13.0 3.3 13.8 31.6 10.5 19.8 29.8

Table 1: Korea's Key Economic Indicators

Source: Bank of Korea, 1995

competitiveness of the country in the world market and government refocused on the promotion of new strategic export industries and import substitution of intermediate inputs and capital goods. Massive investment programmes were introduced to promote and expand Heavy and Chemical Industries (HCI), such as shipbuilding, steel, machinery, petro-chemical and electronics. This was done by providing longterm subsidized loans, through National Investment Fund, more tax holidays and investment tax credits were introduced. This led to excess capacity in the HCls, whereas loans continued to accumulate in the financial sector as a result of colossal lending to those industries. The HCIs drive, however gave a major boost to the growth of the Chaebol²⁴ which radically transformed the industrial structure and market concentration (OECD, 1994).

As a result of increases in the prices of oil and raw materials, coupled with the world recession of the 1970s, performance of the Korean economy weakened, hence export slowed. Inflation rates measured by CPI rose from 3.2 per cent in 1973 to 20.0 per cent in 1974. The country consider: "within this period, the country also witnessed expansionary monetary policy, which led to persistent deficit in current account due to excessive foreign borrowing to finance investment projects (Jong-Wha Lee, 2006). Consequently, external debt grew rapidly throughout the 1970s reaching \$US25.0 billion, about 45.0 per cent of GDP (Collins and Park, 1989).

Another prominent crisis nearly crashed the Korean economy in 1980: the second oil shock and crop failure affected the gradually recovering economy. These, coupled with the assassination of General Park in October 1979, led to political and

²⁴This is a family-controlled industrial conglomerate in South Korea

social unrest. This was the period when Korea first recorded a negative growth rate of -2.7 per cent, while inflation surged to 22.4 per cent (Charles and Mosayeb, 2006).

However, the country recovered immediately from the crisis, largely due to improved harvest and a stabilization policy launched by the administration of General Chun (Jong-Wha Lee, 2006). The GDP rose to 6.2 per cent in 1981. The BOP improved slowly, the current account deficit-GNP ratio declined from 8.5 per cent in 1980 to 1.9 per cent in 1983. The economy further stabilized and inflation rate dropped to 6.6 per cent in 1982 from 17.7 per cent in 1981.

Period of Reformation

In 1983 the economy began to recover, performing fairly well, with GDP growing at 12.0 per cent. Inflation dropped significantly to less than 4.0 per cent between 1983 and 1988; signifying that the economy had begun to respond to the various anti-inflationary measures adopted by the government through tightening of both monetary and fiscal policies. For instance, money supply was controlled strictly such that M2 growth rate slowed from 21.3 per cent in 1982 to 7.2 per cent in 1984 and the overall government budget deficit as a ratio of GNP fell sharply from 4.7 per cent in 1981 to 1.0 per cent in 1985 (Collins and Park, 1989). External trade and financial markets liberalization was aggressively pursued. The government shifted attention from direct intervention in industries towards guidance; hence preferential lending rates were abolished. State owned commercial banks were privatized and more importantly foreign investment was partially deregulated (Haggards et al, 1994). There began also aggressive financial support for Small and Medium Enterprises (SMEs).

Consequently, BOP further improved steadily as current account deficit fell drastically to 0.9 per cent of GNP in 1985 from 1.9 per cent in 1983. The country recorded a surplus of \$4.3 billion in 1986. Within this period, inflation grew at a single digit rate of 5.7 per cent, while growth rate averaged 9.2 per cent, annually. There were high savings and investment, while unemployment was very low (Corsetti, Pesenti & Roubini, 1998). This impressive performance culminated into South korea's accession to the Organization for Economic Cooperation and Development (OECD) in December 1996.

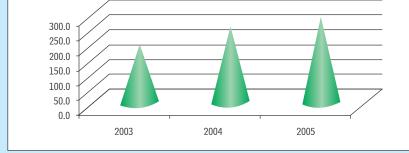
Period of Slowdown and Restructuring

In 1997, the country's exchange rate collapsed. Most of the Chaebol became bankrupt and had to seek protection from creditors. The excessive lending to the conglomerate (i.e. Chaebol) led to sharp deterioration in nonperforming loans (NPLs), hence

economic slowdown in 1998. The country experienced a 'tech wreck' in 2001 arising from sluggish world demand for IT related products upon which the economy was heavily dependent for export growth. In 2002 came a credit card bubble which was followed by weak domestic demand. In 2003 the economy entered another economic downturn. Domestic demand weakened, but real export grew remarkably in 2004 and 2005 to an historic high of 20.0 per cent, while output grew by 4.6 per cent (Charles and Mosayeb, 2006)

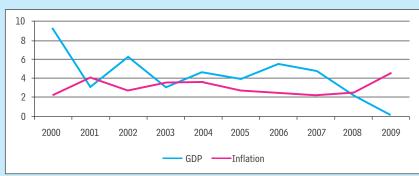
The country's economic performance within this period was largely due to: reform effort in the financial sector, opening to international competition, strength in the Information and Communication (ICT) sector, as well as strong demand from China. There was also significant inputs from labor due to high literacy rate which resulted from colossal investment in education (Charles and Mosayeb, 2006).

Figure 4: Growth Rate of Export, 2003 2005 (US\$billion) 300.0



Source: Sung Hoon, 2006.

Figure 5: Growth Rate of GDP and Inflation in Korea, 2000 2006



Source: Kosis database 2009, World Bank Development Indicator, 2003, World Economic Outlook, 2006.

Period of Downturn and Quick Rebound

Although, due to the global downturn in 2008 arising from alobal financial crisis that started in the US, the real GDP growth slowed to 2.2 per cent and further declined to 0.2 per cent in 2009 and rebounded to 6.1 in 2010. The inflation rate slowed down from 4.6 per cent in 2009 down to 3.0 per cent in 2010. The country is now the 6th largest economy in the world²⁵, the fourth in terms of foreign reserves, first in shipbuilding, fifth in steel and automobile and first in Dynamic Random Access Memory (DRAM) semiconductors manufacturina. It was rated A+ (domestic), A (foreign) and AA- (T & C assessment) by Standard and Poor's in 2010, A1 with stable outlook by Moody's and A+ by Fitch rating agency. This impressive performance has led to dramatic improvements in the quality of life, as infant mortality dropped to as low as 6.16 deaths/1000 live births, life expectancy rates increased to as high as 77.04 years, literacy rate stood at 99.0 per cent, while population below poverty line reduced to as low as 15.0 per cent (figure 5).

Success Factors

orea had experienced and is still experiencing rapid development. This is, in spite of the inherent domestic economic weakness, Asian financial crisis of the 1990s and the recent global economic downturn resulting from mortgage crisis that started from the US. How has the Korean economy attained this goal of robust and steady economic advancement is an issue worthy of examination. Some of the prominent factors behind the success story of Korea are:

Strong Political Leadership and Institutional Building

The first Korean government

established in 1948 carried out early reforms and well prepared planning. It embarked upon a land reform, making land distribution more egalitarian. It gave administrative support to indigenous firms by giving some of them privileges to buy foreign currencies at concessionary rate and borrow funds from banks at preferential rates. The government also erected tariff barriers and imposed prohibition on manufacturing imports so as to protect the infant industries. General Park Chung Hee's administration shifted the policy strategy to that of stimulating growth through exports promotion (EP). He gave various types of favour to exporting firms according to their exports performance.

By placing firms under intense competition from foreign companies and by widening contacts with the developed world, productivity was accelerated and growth became faster. In the 1970s the government intervened heavily in the financial markets, directing banks to make available low interest loans to Chaebols. Successfully expanding the capital-intensive industries more rapidly than the rest of the economy in Asia, the HCI drive generated a lot of export expansion and consequently export targets were met. President often convened monthly export meetings with the HCI committee in order to deliberate on the achievements, and where possible, strategies were modified.

Emphasis on Investment in Human and Capital Inputs

The Korean government invested massively on human and capital inputs, as well as infrastructure and technology overtime. Educational standards were extremely high. The proportion of people

graduating from high school in Korea in the 1990s was higher than anywhere else in the OECD. Korea made tremendous progress in term of education (figure 3). The literacy rate in 2005 was 98.0 per cent and grew to 99.0 per cent in 2009 (UNDP report, 2009). Between 1980s and early 1990s the country concentrated on acquiring and incorporating the most advanced technology available in the world. In addition, the public and private sectors of the economy strategically focused on competitiveness through technological selfsufficiency as well as the adoption of new technology from Russia and China. Technology transfer, incorporation and assimilation formed the basis for the Korean skill and capital acquisition.

This contributed significantly to rapid development of the country as real GDP grew remarkably from 8.9 per cent in 1995 to 10.9 per cent in 1999 and despite the recent global financial crisis, Korea's real GDP growth was still impressive. It grew by 5.5 per cent and 4.8 per cent in 2006 and 2007, respectively (figure 6).

Stable Macro-Economic Policy

Inflation was kept low enough to encourage long term investments in physical capital. Macroeconomic policies were generally guarded, with narrow budget deficits and small size of the government spending. Exchange rate was pegged against the US dollar while inflation which was 4.1 per cent in 2001 dropped gradually to 1.64 per cent in 2010.

Outward-looking and Industry Oriented Development Strategy The government of Korea, in its attempt to achieve the set goals of economic development did not only set up Exports Promotion Agencies (EPAs) but adequately financed them to ensure that they

²⁵In terms of exports



carried out their functions accordingly. For instance, the Export-Import Bank of Korea (KEXIM) alone, one of the EPAs in the country, received between 1998 and 2005 capital injections, totaling W2.4 trillion (US\$2.4 billion) from the government. The country's national development bank Korean Development Bank (KDB) - one of the strongest among the Korean financial institutions received between 1998 and 2005 over W10.4 trillion (US\$8.8 billion) to strengthen the bank's capital base. This is, in addition, to the banks constitutional ability to access immediate funds support from the Central Bank. The bank contributed significantly to the development of high-tech and information related industries as well as SMIs. The bank also played a prominent and active role in the restructuring of the Korean corporate and financial sectors after the 1997 Asian financial crisis.

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Investment in Research and Development (R & D) Centres

The government encouraged local industries to expand their investments in R & D through incentives such as accelerated depreciation allowances, investment tax credits, deferral of income tax payments and duty-free imports of selected capital goods. The government was also involved with business development in support of strategic industries, in addition to

its own direct funding of R & D to develop key technologies. The most recent example is the planned investment of \$27.25 million in the research and design of High-Definition Television (HDTV) technology (Tairu, 2003).

The government is also active in creating and promoting a conducive atmosphere for the development and enhancement of Science and Technology (S & T) within the country. This is done with the co-operation of the academia, industry and the media communities. Investments in technology have increased more than 20-fold from US\$480.0 million in 1980 to US\$10.0 billion in 2000 and above US\$20.0 billion in 2009, while technology investment per GDP has rose sharply from 0.84 per cent to 2.68 per cent during the same period (world fact book, 2010). Even in the middle of the foreign currency crisis of 1997/98 and the resultant economic hardship, Korea was able to increase investment in R&D from 3.6 per cent of government budget to 4.7 per cent, which amounted to US\$3.85 billion in 2002. The government had initiated a nationwide science movement whose objective is to create a favourable environment in which the general public can apply scientific knowledge to daily living. This type of nationwide public support for science and education has provided a strong

foundation for individual and community support for local technological infrastructure development.

4. Emerging Challenges

Ithough, the Korean economy has made a remarkable improvement over time, some fundamental challenges have emerged in the developmental process. Some of these challenges are quite critical, such that if immediate and appropriate attention is not taken, it could result into adverse socioeconomic problems in the near future.

Diminished Capital Input and a Decline of the Workforce

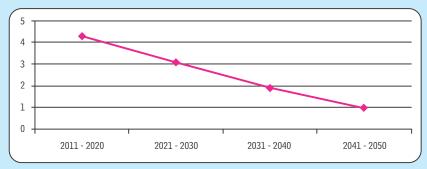
The nation's economic growth slowed down in 2009 and experts forecast further slowdown (figure 7). The growth potential is not expected to go beyond 1.0 per cent from 2041 up to 2050. This is attributed largely to ageing nature of the population. The nation would become a completely aged population in 2019 when 14.0 per cent or more of the population would be sixty (60) years of age and above. This development calls for urgent attention as it signals a serious threat to the economy. The negative implication of having such a large population of old people is colossal.

In another development, Korea has two classes of workers: two third of employees are regular workers, who enjoy high level of employment protection in the OECD, while there are temporary workers, with fewer rights representing the largest proportion of the workforce. If this problem is not dealt with immediately; there is likely going to be a trade dispute in the near future.

Widening Income Gap

The fact that the present administration has placed more emphasis on achieving greater equality in wealth distribution notwithstanding, the income gap between the 'haves' and the

Figure 7: Potential Growth Rate Forecast 2011-2050



Source: Korean, Ministry of Finance and Economy

'have-nots' is on the increase since the financial crisis in 1997 and further worsened by the recent alobal financial crisis that started in the US. The average monthly income of urban households in the top 20.0 per cent grew by 2.8 per cent in 2005 to 2.98 million won. while those in the bottom 20.0 per cent rose by 2.0 per cent to 1.62 million won. The top 20.0 per cent earned 5.43 times the income of the bottom 20.0 per cent in 2005. The average household income of the highest 10.0 per cent grew by 24.2 per cent in 2007, while the lowest 10.0 per cent grew only by 2.7 per cent (Korean National Office of Statistics, 2006). This growing disparity is attributed largely to the deregulation of labour and capital markets (Florence, 2006).

Inadequate Financial Sector Regulation

There are a lot of complexities in the regulation of a rapidly evolving financial sector. The credit card boom and bust of years 2001 and 2002 are good examples. Tax incentives rapidly encouraged the use of credit cards. Between 1999 and 2002, there was on the average, four credit cards for every Korean adult. The credit card companies could not obtain credit to cover their growing portfolio of deteriorated assets, until government intervened in 2002 through the Korean Development Bank (KDB). This type of intervention is not without cost.

Poor Reputation for Korean Corporate Governance

Due to poor reputation of the Korean corporate governance, local firms continue to pay a premium for equity capital; therefore price earnings ratios remain below other countries price indicators, including regional competitors such as Taiwan, India and Thailand (Stanley, 2004). According to Korean Fair Trade Commission's report (2005), there are wide disparities between ownership and control of the ten largest Chaebols. The percentage of shares owned directly by the controlling families has really fallen to less than four per cent, but they maintained excessive control over the conglomerates. This is seen by foreign interests as a case of discrimination against other shareholders. The government has to put pressure on companies to improve their corporate governance. This, if done will improve the image of the companies, hence attract more capital to the country.

Less Focus on Environmental Protection Programmes

Although, the Korean government has shown some level of concern over the emerging environmental problems, yet much needs to be done to curb the destructive impact of decades of developmental activities on the environment. Besides, the induced urban environmental degradation such as air pollution in large cities, water pollution from the discharge of sewage and

industrial waste continue to pose challenges to the Koreans. The country is also faced with some natural disasters such as acid rain, occasional typhoons which result into high winds and floods and low level of seismic activity, thereby further worsening the environmental issues. More attention, therefore, needs to be paid to environmental sustainability considering the pace of socio-economic development in the country.

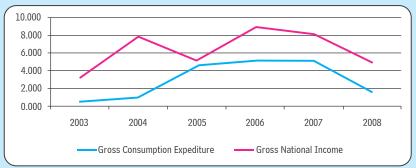
Dwindling Domestic Demand

The task of stimulating consumption in a productive economy is very crucial, since failure could lead to fall in prices resulting from demand shortage, output reduction and consequently loss of jobs. The level of consumption in Korea rises more slowly than the rise in income (figure 8). National income grew by 3.2, 5.1 and 4.9 per cent, respectively in 2003, 2005 and 2008, but consumption expenditure sluggishly increased by 0.5, 4.6 and 1.6 per cent, respectively. The need for stimulating domestic consumption is to help the country off-set export demand shocks.

5. Lessons for Nigeria from the Korean Experience

robably due to the recent reform effort of government, growth in Nigeria has recorded some marginal improvement, inspite of global economic downturn arising from the recent global financial crisis, with real GDP increasing from 2.3 per cent from 1991 to 5.4 per cent in 2000, 10.2 per cent in 2003 and above 6.0 per cent in 2009 (figure 9). Also, other economic indicators remain modest as inflation rates declined from 10.0 per cent in 1980 to 7.5 per cent in 1990, 6.6 per cent in 2000, and 5.4 per cent in 2007. However, it increased to 12.4 per cent in 2009 (figure 10), while external debt burden reduced significantly due to the discount in debt portfolio for Nigeria in 2006.

Figure 8: Annual Consumption Expenditure & Gross National Income for Korea 2003 - 2008.



Source: World Bank, 2009

From all indications, the country's economic performance over the years has been relatively unsatisfactory, considering the growing level of abject poverty, social exclusion and general economic misfortune. In PPP terms, Nigeria's per capita GDP which was US\$1,113 in 1970 was estimated to be US\$1,084 in 2000, representing a fall of 2.7 per cent. Although, it hovers around US\$1,175 in 2009, this places Nigeria in the list of poorest countries of the world despite her abundance resources. The prospect of meaningful development in the country especially in the face of a rising spate of corruption, wastage and absence of bold and determined leadership remains bleak. The possibility of reducing poverty by half by 2015 in accordance with the Millennium Development Goals (MDGs) agreement remains doubtful. For Nigeria to attain possibly the position of any of the

"Asian Tigers", particularly Korea despite its emerging challenges and regardless of the changing structure of the world economy, it should learn, to a areat extent, from the experience of the Korea. First, the political stability and general security of the country is essential. Economic development cannot be achieved in the face of experiencing religious and political violence since the the six aeo-political regions of the country have had their own share of one political cum religious crisis or the other since 1999. How can the assured security and presence of law and order.

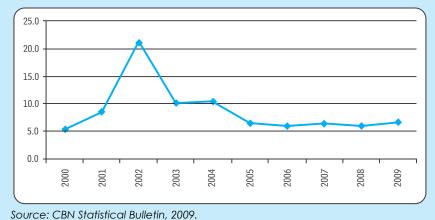
political, ethnic and religious violence. Nigeria has been inception of the democratic aovernment in 1999. Virtually all the country, for example, attract the highly required FDI when it is constantly in crisis? Asian countries in general and Korea in particular are hot spots for FDI because of foreign investment in Nigeria is great, but many foreign investors are still unaware of the past and current opportunities in Nigeria. Various types of violence have created negative image for Nigeria, hence preventing her from realizing her ambition. Nigeria must borrow a leaf from Korea.

The potential for highly profitable

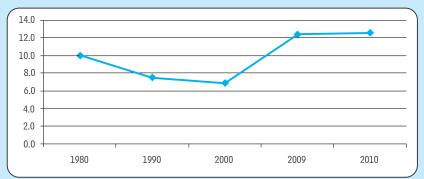
Secondly, Nigeria must strive to remove the bottlenecks in establishing business in Nigeria, tackle the problem of infrastructure, as well as invest aggressively in human capital and Research and Development (R & D) because these are essential conditions required to place an economy on the path of sustainable development. For example, Korea's aggressive investment in education stands out unique in the sense that the feature of the country's educational expansion did not increase gradually but through sporadic jumps. The first major increase occurred in 1946 when primary school enrolment surged by 56.1 per cent from 1.4 million to 2.2 million, while secondary school enrolment increased by 62.5 per cent from 8,000 to 13,000 (table 2). Similarly, Korea's overseas spending on education alone, amounted to US\$2.5billion and US\$3.4 billion in 2004 and 2005, respectively (Euromonitor, 2005).

The on-going economic reforms must be carried out with vigor. Sound macroeconomic policies must be put in place. What Korea has done over the years is a massive investment in these key areas. To jump start the economy, Nigeria must follow suit. In Nigeria, virtually all the available infrastructures are in a deplorable condition, investment in education is poor, adult literacy is still very low. For instance, Nigeria recorded adult literacy rate of all time high of 62.0 per cent in 2005 as against 98.0 per cent for Korea in the same period. Nigeria must invest heavily in infrastructures, human capital development, Research and

Figure 9: Growth Rate of Real GDP in Nigeria







Source: CBN Statistical Bulletin, 2009.

Development (R & D), as well as provide good leadership devoid of corruption, rather than instigating baseless political cum religious crises.

Thirdly, there is need for an outward orientation with strong incentives for exports and commitment to growth through trade promotion. Nigeria should also look at the possibility of removing the existing bias against exports. The situation where some agricultural commodities are listed in the exports prohibition list does not augur well for the country. Regardless of the fact that export subsidies and import substitution subsidies are prohibited by the World Trade Organization (WTO), exports promotion agencies should still be adequately funded to facilitate export expansion and diversification. This is possible since the prohibition does not cover R & D, environment, regional development and more so, there is an enabling clause for Less Developed Countries (LDCs). What Korea did in the 1970s was to promote exports through government agencies by

providing incentives such as; tax relief, tax exemption, tax holidays, export loans at preferential rates etc. The on-going system of making foreign exchange available to end users Wholesale Dutch Auction (WDAS) - and the deregulation of the foreign exchange market should be sustained. This will help to achieve a realistic exchange rate and serve as incentives for exporters. It will also enable the exporters to acquire inputs for exports at competitive prices.

Fourthly, policy summersault must be seriously addressed. The country has to carry-out a medium to long term plan of where it plans to be in terms of vision, including the time frame. Vision 20:2020 is a good example in this case, but it must be consistently implemented, monitored and possibly modified, if necessary for the purpose of achieving the desired goals.

Conclusion

igeria is blessed with more favourable environment than South Korea for economic development. Thus,

Nigeria has abundant natural resources including large population with about 50.0 per cent productive labour force, yet recording poor performance. It would be recalled that Korea emerged from one of the poorest nations of the world to a leading manufacturer of microchips, LCD panels and automobiles, and eventually a proud member of group of twenty (20) leading industrialized nations of the world. South Korea is probably the best single example of how international market forces, if cleverly exploited, can turn the poorest of nations rich in an amazingly short period of time.

Korea's success story cannot be attributed to the state alone. It was a total synergy effect from the government, the private sector and the public. The country implemented industrial policies that are growth friendly. The Korean technocrats realized from the onset, advantages inherent in using low-cost labour to produce and export cheap manufactured goods to the industrialized world, hence concerted effort of the state and the private sector was directed towards institutional building, research and development, investment in capital and human resources, as well as domestic production and outright promotion of exports. For Koreans, it is no more a miracle, but the fruit of their sweat, diligence and patience. South Korea has indeed offered a priceless lesson in economic development. Now it is Nigeria's turn to strive to accomplish an economic miracle along the Korean model.

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APPENDIX

Table 2: Number of Student by School Level, 1945 - 2010 (in thousands)

	Elementary School		condary Sch	Higher/Tertiary Institution	
Year		Middle	High	Total	
1945	1366	-	-	81	8
1946	2159	-	-	125	10
1947	2183	-	-	198	14
1948	2426	-	-	278	-
1949	2771	-	-	322	-
1950	2658	-	-	382	-
1951	2073	-	-	267	-
1952	2369	312	133	445	31
1953	2259	324	179	503	38
1954	2676	420	224	644	63
1955	2947	475	265	740	78
1956	2997	459	289	748	90
1957	3171	440	284	724	84
1958	3316	398	279	677	74
1959	3558	472	271	743	76
1960	3662	529	263	792	93
1961	3855	621	282	903	134
1962	4089	655	323	978	116
1963	4422	666	364	1030	105
1964	4726	667	400	1067	113
1965	4941	751	426	1177	106
1980	5658	-	-	-	648
1985	4857	-	-	-	1456
1990	4869	-	-	-	1691
1995	3916	-	-	-	2225
2000	4030	-	-	-	3003
2003	4185	-	-	-	3223
2010	3837	-	-	3423	4244

Source: McGinn, et al (1980), cited in Jong – Wha Lee and www.nationmaster.com and tradingeconomics.cim

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1. Introduction

he central focus of most central banks is to ensure price stability through the operation of monetary policy. To assist central banks to achieve the mandate of price stability requires effective liquidity management in addition to some tools to analyze development in the economy. One of these is liquidity forecasting. By liquidity, we refer to reserves (deposits) of the banking system held with the central bank. Liquidity forecasting involves forecasting the autonomous components to identify the path of reserves in the absence of central bank intervention. The main purpose of producing short term liquidity forecast is to determine what actions need to be taken to ensure that financial prices move consistently with announced operating targets.

LIQUIDITY FORECASTING: NIGERIA'S EXPERIENCE²⁶

Liquidity forecasting is a critical element in the overall monetary management framework. This is because it determines whether a liquidity shortage-injection or surplus-absorption is required for effective monetary policy. It also provides short horizon input for tracking day-to-day changes in Central Bank balance sheet, currency in circulation and bank reserves as well as the forecast of their future values. The overall objective of liquidity forecasting is to provide quantitative guidance for the appropriate level and direction of monetary operations. Having an accurate liquidity forecast helps to reduce the volatility in the market rates; mitigates credit, markets and liquidity risk on Central Bank's balance sheet; flattering money market yield curve; achieve stable exchange rate; and promotes credibility of Central Bank's actions in monetary policy

implementation. With the information from daily liquidity forecasting it assist monetary authorities to achieve set targets.

This paper discusses the experience of the Central Bank of Nigeria (CBN) in liquidity forecasting by examining the key components of the Central Bank balance sheet. The rest of the paper is divided into four sections; following this section is the conceptual framework in section two. Section three covers Nigerian experience in liquidity forecasting and techniques employed while section four contains the challenges of liquidity forecasting in Nigeria and the way forward. Section five concludes the paper.

2.0 Conceptual Framework

iquidity is defined in different ways by different people and for different occasions. In the macroeconomic concept, liquidity refers to the overall monetary conditions, indicating the extent of mismatch between demand and supply of overall monetary resources, (Reserve Bank of India, 2002). In the context of the financial markets, however, it is narrowly defined as the ease of undertaking transactions in financial assets at narrow bid-ask spreads. It could also be defined as the availability of funds, or assurance that funds would be available, to honour all cash outflow commitments (both onand off-balance sheet) as they fall due (Bank of Jamaica, 2005). Money in its basic form of bank notes and coins is the most liquid asset and is held for its usability as a medium of exchange, store of value or both. In constructing monetary aggregates, it is necessary to evaluate the degree of moneyness of a wide range of financial assets focusing on the extent to which each type provides liquidity and a store of value. Liquidity, therefore, refers to the extent to which financial assets can be sold at, or close to, full market value on short notice. To this end, the most liquid financial assets are currency and transferable deposits as they are exchangeable immediately at their full nominal value to acquire goods and services, as well as financial and non-financial assets. Financial assets other than currency and transferable deposits must possess some liquidity features to be included in liquid instruments and monetary aggregates. Another dimension to

²⁶The views expressed in the paper are those of the author and do not in any way represent the official position or thinking of the Central Bank of Nigeria. The author acknowledges the comments and criticisms of anonymous reviewer.

liquidity is the availability of credit; or the ability of institutions to borrow or take on leverage.

The definition of monetary base differs from one country to another, and even within a country. More than one definition may be employed depending on the analytical use. Broadly speaking, it would include all central bank liabilities to the financial corporations and other sectors (excluding central government holdings of Central Bank liabilities other than currency). A narrower definition, however, would exclude some categories of Central Bank liabilities to other depository corporations, other financial corporations and/or other sectors (IMF, 2000).

From the Central Banking perspective, liquidity refers to the liabilities of the Central Bank (especially currency and banking system reserves) otherwise called the monetary base (Gray, 2007) of which it is the sole supplier (Reserve Bank of India, 2002). Monetary base is also referred to as high-powered money. Its supply depends on the public's demand for currencies, which is determined by the size of monetary transactions and the opportunity cost of holding money, as well as on the banking system's need for reserves to discharge their payment obligations. Thus, the Central Bank supplies the banking system with liquidity through its operations in the inter-bank money market with the deposit money banks (DMBs). In fulfilling these needs, Central Bank attempts to monitor and control liquidity conditions by varying the supply of bank reserves to ensure smooth functioning and stability of financial markets. This is best achieved using some tools such as reserve requirements and policy rates in the overall context of monetary policy.

The demand for and supply of liquidity can be derived from the Central Bank's analytical balance sheet.

Table 1 below shows stylized Central Bank balance sheet IMF (2000).

From the above table the liability side consists of reserve money (RM) which is composed of currency in circulation and bank reserves (required reserves and excess reserves).

2.1 Autonomous Factors of Supply of Bank Reserves

he autonomous factors are factors that are beyond the control of the Central Bank. These factors are very volatile and difficult to forecast, particularly in countries with exchange rate pegs and large foreign exchange interventions. The factors are as follows;

a) Net Position of the government at the Central Bank: This is the cash flow projection in which the net position with the Central Bank is affected by the government's expenditures (including servicing of government debt) and revenues (including grants) and new borrowing from market.

- b) Net Foreign Assets (NFA): Changes in NFA is attributable to Central Bank interventions in foreign exchange market. On a day-to-day basis, it is mainly short term capital flows, which can create an excess demand supply for the currency and are most relevant for short-run liquidity forecasting purposes.
- c) Currency in circulation (CIC): It is defined as all notes and coins held outside the Central Bank and removed by debiting or crediting banking system's reserves as banks pay for CIC by having their reserves account with the Central Bank. Increase in CIC has a negative impact on the bank reserves and vice versa all notes and coins held outside the banking system's reserve. Long-run determinants of currency demand include scaling variable such as GDP or private consumption, exchange rate, interest rate, inflation, seasonal dummies.
- d) Other Items net: Items not assigned to other categories in the analytical balance sheet of the Central Bank.

The supply of bank reserve on the other hand, can be defined as the sum of the autonomous liquidity position and the policy action of the monetary authorities. It can be derived thus: Supply of bank reserves = Net foreign asset + net position of government + other items net currency in circulation + lending to banks/ OMOs. The first four items constitute the autonomous factors. These are factors that are not under control of the central bank and thus need to be forecast. There may be other sources of autonomous, such as the 'float'27 in the payment system,

Table 1: Stylized Central Bank Balance Sheet.

<u>Assets</u>

Liabilities

Net foreign assets Net position of the government Lending to banks/OMO Other items net Currency in circulation Banks' reserves

²⁷Float is defined in this context as some cash flow that does not occur often

which are important for some countries but not for others. Some items may be irregular. For instance, foreign exchange inflows relating to a privatization programme may have some impact for a few days around the time of privatization only. Also at times profit remittance to the government may happen thrice or thereabout in a year. Therefore, account need to be taken when they happen.

The conduct of liquidity forecasting is the same irrespective of the operating target (quantity or interest rates) of a particular central bank. Liquidity forecasting is therefore, a key component of a central bank's liquidity management framework with the objective of smoothing undesirable fluctuations that could distort the implementation of monetary policy and result in excessive overall market liquidity leading to loss of clarity about the operating target. An accurate liquidity forecast is an essential first step in monetary policy implementation.

The central focus of liquidity forecasting entails collating all relevant information to arrive at the future position of liquidity if nothing is done by the central bank. The outcome of the forecast provide an insight of the direction of liquidity in the system whether a liquidity shortageinjection or liquidity surplus-absorption is required to implement monetary. Liquidity forecasting is therefore, an integral part of liquidity management, which is carried out prior to operation of monetary actions. All depends on how monetary policy objectives are stated.

The task of liquidity forecasting comprises: (i) developing a consistent and coherent framework for capturing expected changes in the Central Bank balance sheet (ii) frequent

contact and communication with all the relevant information sources of data (iii) preliminary data checking to ascertain the consistency of forecasted components (iv) Producing liquidity projection of all the components on daily basis (v) Computing the deviation of the forecast from the actual to obtain the forecast error.

3.0 The Nigerian Experience in Liquidity Forecasting

he banking system in Nigeria is characterized by mixed liquidity position from surfeit position to extreme shortage and is auite volatile in some periods. Prior to 1992/93 when direct control framework of monetary policy held sway, liquidity forecasting was not required for monetary management. It was managed through administratively fixed credit ceilings, sectoral allocation of credit, liquidity ratios, interest rates and moral suasion. With the embrace of marketbased monetary policy and developments in Nigeria's payments system, liquidity forecasting became a crucial precondition for liquidity management.

Before the advent of the global financial crisis the system was always in excess position, thus, the Bank engages in predominantly managing excess liquidity at a very high cost. For instance, the cost of liquidity management increased rapidly from N50 billion in 2005 to N84 Billion in 2007. The liquidity circle being observed in Nigeria is based on substantial movements in the autonomous factors especially cash flows to the three tiers of government (federal, state and local governments) arising from monetization of oil export receipt. Government domestic tax revenues are remitted by the deposit money banks (DMBs) to the CBN. Most outflows come from NNPC DMBs

accounts within two to four days prior to the FAAC meeting. This results in a withdrawal of large quantum of liquidity. However, the release of funds to DMBs accounts of sub-national government is usually done within two days (t+2) following the last day of the monthly distribution of Statutory revenue to the three tiers of government at the Federation Allocation Account Committee (FAAC) meeting carried out at the second week of every month. The share of the Federal Government is kept with the CBN in the CRF account and thus the line Ministries, Departments and Agencies (MDAs) draw on their accounts within the month. These activities lead to large movements in the Federal government's position with the CBN, contributing to the volatility of liquidity.

The bi-weekly foreign exchange sales to banks under Wholesale Dutch Auction system (WDAS) and the weekly sales to BDCs is an integral part of liquidity management tools²⁸ that help in daily withdrawals from bank reserves. In addition, the system's demand for reserves varies daily, reflecting factors such as requirement for banks to hold additional reserves on the day of foreign exchange auction in order to pre-fund their bids. This and others are factors that are used by the forecast to arrive at the best judgment of demand for reserves by the DMBs on daily basis. The variations in both supply and demand for bank reserves lead to large movements in money market rates.

With the new Monetary Policy Frame-work introduced in 2006 under Monetary Targeting Framework, the operating target is Monetary Policy Rate (MPR) while the overnight interest rate of the inter-bank money market complements the broad money supply as the intermediate target. In line with the new paradigm, the

²⁸In some countries like Uganda sales is used as liquidity management instrument

focus of daily forecast is to reduce the volatility in the interest rate by bringing it closer to the MPR which is the operating instrument for the purpose of achieving intermediate target of broad money (M2) and thus, attainment of the ultimate goal which is inflation.

The present model for liquidity forecasting is based on the balance sheet approach. The CBN calculates on a daily basis the estimated level of bank reserves and the amount of the short fall/excess with respect to the level that is consistent with the Monetary Policy Rate (MPR).

3.1 Liquidity Forecasting Technique in Nigeria

n principle, three main approaches are used to forecast the different component of liquidity supply and demand, These are as follows:

- a) Accurate forecast rely largely on information exchange from relevant offices and departments of government.
- b) Time series models: this is also referred to as a theoretical model, it make use of the historical path of the variable to predict future values (AR, ARIMA).²⁹
- c) Structural models: this makes use of all relevant information that explain the variables and are formulated either as a single or multi-equation model (SARIMA)³⁰. This is usually used for monthly forecast.
- d) Judgmental estimations: this is more or less discretionary

and relies more on value judgment. Knowledge of how the economy works especially the liquidity movements is quite imperative especially in developing economy where the financial system is still not fully developed.

Generally, the time series and the structural models are based on the assumption that underlying relationships are stable. However, in the CBN the process as it is currently being practiced involves the blend of the above three approaches.

3.1.2 Liquidity Forecasting Table

he CBN is operating a forecasting table and is set up in an excel spreadsheet, which has the following main components.

i) Opening Reserves: This comprises the closing balance of the previous day plus the total errors from previous forecast. OBt=TRt+Et-1³¹

ii) Currency in Circulation (CIC):

Changes in currency in circulation (CIC): This refers to the changes in all notes and coins held outside the Central Bank and removed by debiting or crediting banking system's reserves as banks pay for CIC by having their reserves account with the Central Bank. Increase in CIC has a negative impact on the bank reserves and vice versa. The Forecast of CIC is carried out taking into consideration various factors namely: multiple seasonalities (trend, daily pattern, festive period, holidays and elections expenditures etc).

iii) Federal Government Operations

This is part of the autonomous factor that the CBN does not have control over. Net Government Position (NGP); this is the net change of inflow and outflow for a particular period of time. Under this heading there are three items, namely; Revenue, Expenditure and Net Financing (FGN=Rev+Exp+NF).

A) Revenue

Revenue collection is a withdrawal from the system.

The major source of the inflow comprises of the revenue from Nigeria Customs Service (NCS), Federal Inland Revenue Services (FIRS), Office of Accountant General of Federation (OAGF) Revenue and Investment. NCS revenue consists of collection for the Federation Account³² and Non-Federation Account³³ by the agency. This item has maintained a particular pattern over a period of time. Forecasting NCS revenue item is done by taking the average of previous five days. Most often, the forecast error on this item is less than 3 per cent. FIRS collection is for federation and non-federation accounts. This collection also has a particular pattern. During the second week of every month the collection tends to rise significantly. While for the monthly pattern the revenue increases from July to December. Moving average is used in forecasting this item. The forecast error is quite minimal on this item.

OAGF Revenue and Investment³⁴ is another revenue source but it is quite minimal and highly volatile. Other Revenues (OR) are

²⁹Autoregressive, and ARIMA (Autoregressive Integrated Moving Average)

³⁰SARIMA (Structural Autoregressive Integrated Moving Average)

³¹OBt = TR1+Et-1: OBt = Opening Reserves forecast at the current period; TRt = Total Forecast Reserves of the previous day; Et-1 = Error of the previous day forecast

³²Federation Account is the account that belongs to the three tiers of government in Nigeria (Federal, States and Local Governments), it is a zero account that must be nil by month end, through sharing of all that is accrued into that account at that month. The FAAC Sharing is based on the revenue sharing formula of FGN, SG and LG (52.68%, 26.72% and 20.60%). Nigerian Customs Service collections and FIRS that go to federation accounts are: Imports duties, Exports duties, Capital gains tax

go to federation accounts are: Imports duties, Exports duties, Capital gains tax

33 Non-federation account is an account that is strictly for the federal government (PAYE, Withholding tax etc). there are other accounts that are shared at FAAC namely VAT consolidated accounts.

³⁴OAGF Revenue and Investment is a section under that OAGF Office that collects revenues for federal government (Revenue various from surplus, refunds, and Unspent balances of MDAs).

revenues that do not fall under any of the above category of revenues. Items under this heading include privatization proceed. These collections do not follow any particular pattern. The revenue collection can be expressed as; Rev = (FIRS Rev + NCS Rev +OAGF Rev + OR).

B) Expenditure

These are injections into the system through the mandates issued by the OAGF on behalf of the Ministries, Departments and Agencies (MDAs) to the CBN. These mandates cover personnel, overhead and capital payments. The Liquidity Forecasting Office (LFO) has been maintaining a close contact with the Budget Office, OAGF Funds, and Banking and Payments Department, to collect all the relevant information for that day and the expected future transactions. There has been cooperation from the agencies and they provide information to the LFO but often times some information are received late.

C) Net Financing

This is the net of Nigerian Treasury Bills (NTBs) issues and maturity for various tenors - up to 364 days. Auction is conducted bi-monthly to raise funds for the Government. NTBs issues are seen as withdrawals at discounted value. Conversely, the maturity of NTBs is taken as an injection to the system in which full face value is paid into the system. It is carried out bi-weekly with settlement of t+0. Issue calendar is followed and monitored by the LFO, therefore this item is not forecast. Other source of inflow include new issues and government bonds with the exclusion of non-competitive bonds issue with (T+2) settlement, issued by the Debt management Office. Conversely, coupon payments and bond maturities

form part of withdrawals from the system issued by the Debt Management Office.

D) FAAC / NNPC / JVC /BOI / NEXIM Payments

These are items that are exogenously determined and therefore CBN has no control over them. FAAC payments are made on monthly basis usually around 12th - 14th of every month. The States and Local Governments' share are debited to their DMBs account while that of Federal Government is posted to the Consolidated Revenue Fund (CRF) account domiciled in the CBN. Payments of the share of funds of the sub-national Government to their DMBs account constitute an injection to the system while that of FG is a movement of account it does not have immediate liquidity impact. Some times FAAC is shared along with the proceeds from Excess Crude Account³⁵. This is often monetized for government to undertake some special projects or to augment shortfalls in revenue when it falls below the budget amount³⁶. The share of the subnational government is credited to their DMBs account at T+2.

E) NNPC funds

The NNPC funds with the DMBs are transferred to the Federation Account within the week preceding the FAAC meeting. The amount is substantial and is irregular. It is the biggest withdrawals from the DMBs being observed. Usually NNPC prepares schedule of payments on monthly basis, which specifies the dates which the DMBs are supposed to remit the NNPC funds to the Federation Account. In the case of default, CBN is expected to automatically debit the DMBs if the payments are not made. See appendix 5.

F) Joint Venture Company (JVC) Cash calls

This item is the FGN's contribution to cover funding of exploration and production, expenditure monitoring, and other operating costs of the JVCs. The money are monetized from the JVC cash call dedicated account domiciled in CBN and paid to JVCs naira account in DMBs. These large payments are made around the middle of the month, but the exact timing is uncertain. The forecast of this item is based on an average of previous three periods. It is an injection into the system. Forecasting this item is quite complex as it does not have a particular trend.

G) Bank of Industry (BOI) Fund

This is the intervention funds on Power, Aviation, SMEs, Agricultural and some other funds administered by BOI. The fund is disbursed to DMBs for onward submission to the beneficiaries. This constitutes an injection into the economy.

The disbursement is quite irregular, and equally, the information is not received on time.

H) Nigerian Exports-Imports Bank (NEXIM) Fund

This is a fund that the NEXIM uses to finance the credit in (local currency) transaction of the exporters. This is also an injection to the economy.

IV) CBN Operations

The CBN operations are divided into Foreign Exchange Summary (FES) and Domestic Summary. FES covers all the Central Bank foreign exchange transactions on behalf of government. Changes in the NFA are due to CBN interventions in the foreign exchange market. The individual items under this heading are as follows:

³⁵Excess Crude account is an account operated by the government in which amount realized in excess of the budgeted oil price benchmark is kept.

³⁶The budgeted amount is the amount that is approved in the budget to be shared at FAAC on monthly basis. It changes from year to year. If what is collected for federation account is not up to the budgeted amount, then augmentation is done to make up the amount.

CBN Operations = FES + DS FES = WDASs + WDAS f + BDCs + OF

A) Wholesale Dutch Auction System

Under this window, wholesale of foreign exchange is offered to banks through a biweekly auction; Monday and Wednesday for settlement T+2. The transactions under this window are spot and forward. In forecasting this item the following factors are considered: monthly foreign exchange sales by oil companies³⁷; FAAC disbursement; festive period; and the prevailing foreign exchange policy at that point in time. Moving average and judgmental factors are used in the forecast of this item. WDAS represents withdrawal from the system and therefore it carries a negative sign.

B) Bureau de change (BDC) Sales

This is sales of foreign exchange to the Bureau de Change, conducted once in a week. These transactions are settled through their DMBs Accounts and therefore have an impact on bank reserves, with settlement date of T+1. Forecasting BDCs purchases of foreign exchange is done by addition of number of the BDCs that participated, multiplied by the amount at any point in time. However, when some of the BDCs do not participate an averaging method is adopted.

V) The Domestic Summary

This comprises of the net position of OMO auctions and maturity, Repos and Reverse Repos, SLF, repayment, two way quotes. These items are not forecast in the Liquidity Forecasting Table.

VI) Total Reserves Pre-OMO

A) Demand for Reserves: This consists of those excess reserves held for meeting daily obligations by the DMBs. It is established that balance sheet data are not

sufficient to indicate whether a bank has a free or excess reserves, thus, the liquidity forecaster needs to know what the RR target levels are. With the introduction of reserve averaging in March 2011, it is necessary to differentiate between free balances that can be used by DMBs freely on a given day and what is actually free for the maintenance period as a whole that the DMBs can use. In the CBN, forecasters take into consideration, in addition to the above factors other expected precautionary motives for demand for reserves by DMBs and comes up with the best judgment on a daily basis.

Figure 1 above shows that in Nigeria, the daily demand and supply of excess reserves determines the interbank rate on that day. This contrasts with the situation where compliance with a reserve requirement is permissible on average over the maintenance period. In this circumstance, supply and demand can be balanced over a longer timeframe, thereby reducing the interest rate impact of forecasting errors on any particular day. By allowing averaging, volatility in the interbank rate is reduced.

TR Pre-OMO = OB +∆CIC+ FGNO+NOT

Where OB = Opening Balance; Δ CIC= Changes in Currency in Circulation; FGNO= Federal Government Operation; and NOT= Net of Other Transactions: (FAAC payments, NNPC withdrawals, Joint Venture Cash calls monetization; Bank of Industry intervention funds).

a) Cash Reserve Requirements (CRR)

CRR is a statutory reserves that DMBs are expected to hold against specified deposit liabilities for a particular maintenance period. This item is not forecast as the CRR is a function of total deposit liability of the DMBs. The CRR maintenance period in Nigeria ranges from four to five weeks.

b) Daily Excess Reserves

This is made up of the Total Reserves pre-OMO less CRR. Usually, apart from the CRR, the DMBs keep certain amount for precautionary purposes to meet its daily needs and any amount above that is regarded as excess reserves. Excess reserves forecast are the focal point of liquidity forecasting. The demand and

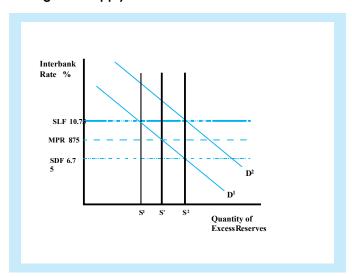
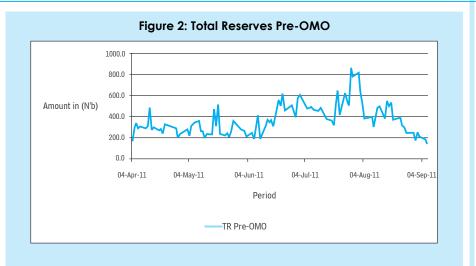


Figure 1: Supply and Demand for Excess Reserves

³⁷This is the sales of forex by oil companies to meet their domestic obligations in respect of the Joint Venture agreements. This sale comes up in the second or third week of the month. The demand at the WDAS window usually drops at the week when oil companies make their sales to DMBs.



supply for the excess reserves is what determines the price of the liquidity in the system and therefore give an insight to the direction and future movements in the price (rates). If the nominal value of the excess reserves position carries negative, it means there is shortage in the system and vice-versa.

c) Demand for Reserve Consistent with the MPR

The DMBs demand for reserves changes over time. Under the current Monetary Policy Framework, "Monetary Policy Rate" (MPR), otherwise called the "Operating Target" rate, serve as an indicative rate for transactions in the inter-bank money market as well as other DMBs' interest rates. The main operating principle of the new framework is to control the supply of settlement balances of banks and motivate the banking system to target zero balances at CBN, through an active inter-bank trading or transfer of balances at CBN. The MPR is set and reviewed from time to time in line with the current and expected inflation rate and general economic and financial conditions.

Analysis of Liquidity Forecasting Performance

The variance table serves as an evaluation table of the performance of the forecast on the previous day and the exact date when the transaction will take place. In the table all the

items are summarized, showing the actual figures against the forecast of that day. The summary of error breakdown captures the error pre-CBN operation and the unexplained error, see Appendix 8

4.0 Challenges and Recommendations

4.1) Challenges

he key challenges confronting effective conduct of liquidity forecasting in Nigeria include the following:

- a) Timely access to all relevant data, particularly the ones from external customers.
- b) Government operations that come abruptly in form of urgent mandates to be paid same day without enough information to the LFO or even the BPD do undermine the forecast.
- c) Lack of forward looking information from the agencies that supply the data for the forecast. Although FLAC provides useful information to the liquidity forecasting process. However, bulk of the data are historical that do not assist much in the forecast particularly data of irregular payments.
- d) Lack of proper model to capture the demand for reserve appropriately does affect the process. Currently, the best

judgment is used to arrive at the expected demand for reserves for the DMBs on daily basis.

- e) Lack of developed payments and accounting system in the economy affects the smooth flow of information as well as its accuracy.
- f) Although the LFO track the mandates from OAGF to the final posting in the CBN, however, there are cases where, some mandates come abruptly that the adequate notice is not given to the LFO and as such cause a wide variation.
- g) The NNPC payment dates are usually not known as banks have discretion of when to pay.

4.2) Recommendations

- A new posting procedure for the mandates needs to be introduced. The CBN need to inform Funds Office of the Office of the Accountant of General of the Federation that all mandates received by 4 p.m would be posted at t+1, while those received after 4 p.m would be treated as t+2. If this procedure is implemented and followed vigorously, the issue of late information would be tackled. thereby reducing the wide variations due to lack of timely information.
- ii) The strict adherence to the posting procedure of T+2 for FAAC funds will help tremendously in reducing the occurrence of spike in the forecast due to the non compliance with the procedure.
- iii) There is need to ensure that all large payments or withdrawals by the CBN to the DMBs accounts be done in the morning before 10 a.m by doing that, it would assist
- iv) The DMBs know their position on time and reduce the volatility of rates at the interbank market.
- v) All attendees of the FLAC

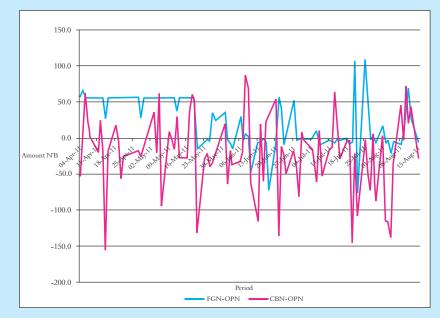
meeting should be made to provide a forecast of their organization's operations, covering the same agreed time period for the coming week, as well as information on outcomes from the previous week with an explanation for any variance observed against the forecast from the previous week. This should lead to a clearer appreciation of the objective of the FLAC meeting.

5.0 Conclusion

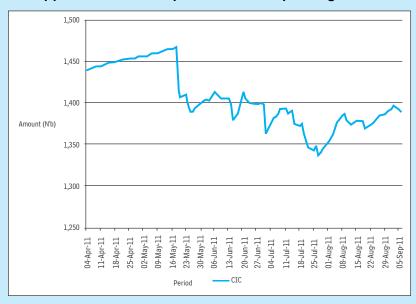
he paper explained the conduct of daily liquidity forecasting in Nigeria. The use of spreadsheet, time series model and judgmental factors are employed in forecasting banking system liquidity. The forecasting technique is providing a good guide on the liquidity path. However, the forecast is faced with some challenges ranging from timely data, lack of forward looking information from relevant data sources agencies. It pointed out the need for proper and timely submission of data to the office on daily basis or as and when due.

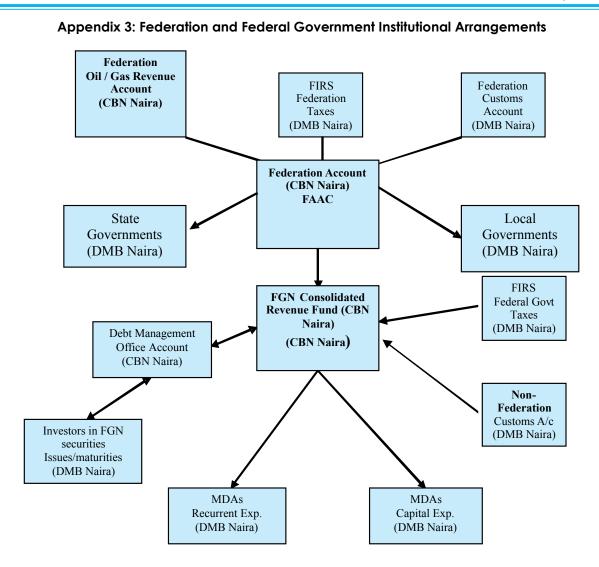
With the reorganization of the Liquidity Forecasting Team, a tremendous improvement has been achieved in terms of the forecast accuracy. The movement of technical staff from the Monetary Policy Department (MPD) to the Financial Markets Division (FMD) have contributed to a better result.

Appendix 1: Net Government Operations and Net CBN operations



Appendix 2: Currency in Circulation April August 2011





Source: Daryll paper on frame-work of monetary policy

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Introduction

eference to the recent global financial crisis appears a cliché as it (the crisis) has been nearly exhaustively documented in all ramifications - the causes, effects and reach. However, business cycles are integral components of economies which are not planned, and the troughs have, over the years, provided the basis for reappraising how effective policy actions vis-à-vis contemporary economic challenges. The recent crisis has

THE RECENT FINANCIAL CRISIS AND THE SPECIAL FINANCING INTERVENTIONS BY THE CENTRAL BANK OF NIGERIA: IMPLICATIONS FOR THE REAL SECTOR OF THE NIGERIAN ECONOMY³⁸

exposed some of the policy inadequacies in the global economy and shown the extent to which financial innovations went ahead of regulatory provisions.

This paper reviews the impacts of the crisis on the real sector of the Nigerian economy and highlights the various special financing intervention schemes, which the Central Bank of Nigeria (CBN) has wielded in a bid to reverse the down turn in the sector. To achieve this objective, the study begins with putting the financial crisis in perspective with the view to creating the foundation to understanding how the real sector was cracked. Section two examines the generic consequences of the crisis on the Nigerian economy. Section three dwells on the specific effects on the real sector, while section four touches on the special financina interventions by the Central Bank of Nigeria including the sources of funds, terms and the modes of operation. The last section concludes the study.

1.1 Putting the Crisis in Perspective

he genesis of the global financial crisis has been traced to the default on sub-prime mortgage loans to individuals with poor credit ratings in the US in 2007. These loans were backed by the Federal Government and resulted in cheap borrowing and an unprecedented boom in the US housing market. The rates for the loans were higher and adjustable which were fixed for 2 years. As the rates increased, the prices of houses fell, leading to defaults in payments. Banks stopped lending

and even recalled some of their loans and there was pressure for them (the banks) to raise capital. This led to a "credit contraction" where financial institutions in the US tightened their standards and lending conditions thereby putting pressure on the economy. The tensions reverberated when the institutions that were carrying these loans issued such securities as collateralized debt obligations (CDOs) and Mortgage Backed Securities (MBS) and sold to investors all over the globe.

Owing to the high rate of default, credit dried up, interest rates went up, demand, both for consumption and investment, dipped, the economy began to shrink. The Section 28 of the Emergency Economic Stabilization Act 2008 in the US made credit matters worse as banks rather than lend to one another preferred the remunerated safe haven at the Fed. Consequently, wide spread distresses emerged, investors in the CDOs and MBS ran aground. The sustained rise in the price of oil did not help too because it further squeezed households and investors so that the small economic life they had left fizzled. The seeming collapse of the largest economy in the world slowed world trade, broke down stock markets across the globe, damaged national currencies and changed all the financial equations wherever they were found. Policy makers swiftly reacted to reverse the free fall of the world economy.

Consequently, wordsmiths designed myriads of dicta to either describe the enormity of the

³⁸The views expressed in the paper are those of the author and do not in any way represent the official position or thinking of the Central Bank of Nigeria. The author acknowledges the comments and criticisms of anonymous reviewer.

impact on the real economy or the various intervention measures which monetary and fiscal authorities advanced to tame the trend. 'Bailout' emerged probably as one of the most used words since September 2008 to describe packages being used to mitigate the adverse effects of the financial meltdown. Bailouts have been used in two senses including directly providing financial succor to ailing companies and loosening fiscal and monetary policy stance to provide relatively cheaper credit to the system. The first case was exemplified by the United States government injection of about US\$ 30 billion in Bear Steams & Co, US\$ 200 billion purchase of preferred stocks in Fannie Mae and Freddie Mac, and the US\$ 85 billion emergency loan granted the American Insurance Group (AIG). Fiscal bailouts became famous in the Great crash when Keynes and like minds advanced the argument that governments should intervene in the economy by raising expenditures. The Keynes recommendation was instrumental in revitalizing the world economy.

Recent examples of fiscal bailouts include the US\$ 700 billion packaged by the US government to stimulate activity in the Main Street and foster confidence at the Wall Street. Other concerned governments have also been proactive in their fiscal regimes to check the adverse outcome of the financial meltdown. Germany (US\$ 671 billion) and France (US\$ 491) are two examples.

Monetary policy has basically reacted with the traditional medicines of cutting policy interest rates-the US, Japan, UK-everywhere, Central Banks downplayed the role of keeping inflation low and less variable in preference for stimulating demand in the market place. Liquidity ratios have also been adjusted downwards so that assets which were hitherto rated solid could be used as collaterals for Central Banks liquidity accommodation.

2. Nigeria and the Financial Crisis

he first visible impact of the crisis on the Nigerian economy was the near collapse of the stock market which recorded a decline in investment of more than 70 per cent between 2008 and 2009. Market capitalization fell from N13.0 trillion in September 2008 to N4.5 trillion in 2009. The fall in stock market indices; the wanton depreciation and large volatility of the naira exchange rate; the cry by government over depleted revenue profile as a result of the monumental collapse of the international price of Nigeria's Bonny Light crude, were also other observable effects. In the financial sector, a large mass of nonperforming loans showed up in banks' balance sheets as aftershock of the crisis - mainly on account of margin loans and the oil and gas sector, two sectors that the crisis hit hardest.

There have been several speculations in the news media on how the financial crisis impacted on the Nigerian economy, most of which not empirically verified. However, Mbutor (2010) studied the lending behaviour of banks in Nigeria in the face of exchange rate volatility and stock market fluctuations as a proxy for identifying the nexus through which the crisis permeated the Nigerian economy. The approach could be justified on account of the fact that the banks command lion's share in the stock market, and are the major conveyors of policy actions to the real economy so that the energy to consume or invest, potential or kinetic, is ultimately guided by banks. The study found that the curtailment of bank lending contributed to the collapse of the stock market and there was no reverse causality; the collapse of the stock market caused exchange rate to depreciate and there was no reverse causality; loans and exchange rate do not have any visible line of causality. Put differently, it was the fall in equity prices that caused investors to divest abroad, thereby piling

pressure on the naira and consequently crashing the value.

3. Specific Effects of the Crisis on the Real Sector Crude Oil / Commodity Prices

he recent financial crisis affected the real sector of the Nigerian economy in a number of ways. First the economy being largely mono product in nature depends on the export of crude oil for more than 80 per cent of total revenue to the government. Thus any adverse international development that impacts crude oil pricing has direct implications for the Nigerian economy. The financial crisis which dried up credit and compressed aggregate demand in the United States and Europe led to severe decline in demand for crude oil, thereby causing the price of Bonny Light (37 API) to dip from USD126.8 at close of trading in July 2008, to USD 49.97 in November, 2008. The decline was sustained until the end of December 2008. The direct consequence of the negative price development was the sharp decline in government revenue, budget deficit and the attendant effect of stalling government investment in infrastructures. As a consequence, government's final consumption expenditure declined to 14.73 percent in 2008 relative to the level in 2007. At the end of 2009, government expenditure marginally grew above the preceding year but remained 13 per cent below the pre-crisis level. Also, real aggregate domestic demand fell by more than half between 2007 and 2008, though it recovered marginally in the last quarter of 2009.

The indices of average world prices of Nigeria's major agricultural exports also declined relative to the pre-crisis period. Particularly, the index of soya bean fell dismally by 82 per cent between end-2007 and end 2008. The indices of palm oil, cotton and coffee fell by 63 per cent, 23 per cent and 16 per cent, respectively, in the period (CBN Statistical Bulletin).

Aggregate Prices

Consumption is import oriented in the Nigerian economy. The adverse shocks in international finance impacted aggregate domestic prices through imports, especially, of consumer goods. Although world aggregate prices were depressed during the crisis, the large depreciation of the naira vis-à-vis the US dollar increased the cost per unit of domestic imports. Consequently, the consumer price index showed violent variations at the outset of the crisis. The year-onyear inflation rate rose sharply from 6.6 per cent in December 2007 to 15.1 per cent in the last quarter of 2008. In the last quarter of 2009, the rate of inflation had moderated to 12.0 per cent following the relative stability of the exchange rate. The effect of the crisis was amplified in the food component of the consumer price index. The year-onyear food inflation for August 2007 was -1.2 per cent. The pressure from the crisis increased food inflation to 17.1 per cent in September 2008 and the same trend continued until December 2008 when it rose to 18.0 percent.

Domestic Output/Credit

As in other economic jurisdictions, the aross domestic output of the Nigerian economy contracted as a fall out of the financial crisis. The underlying factor was mainly the decline in industrial production index. The total industrial production index fell from 119.4 in 2007 to 117.8 when the crisis set in at the end of 2008 before it recovered modestly in 2009 as the economy got on the path of recovery. The decline in industrial production was driven mainly by the Mining subsector, which contracted by 2.4 per cent between 2007 and 2008. The effect of the crisis on industrial production could be gleaned more visibly when quarterly changes are evaluated. In the first auarter of 2008, the index stood at 118.34, while it fell to 117.23 in the last quarter. It worsened further in the first quarter of 2009 and stood at 116.9. Over all, the growth rate of the Gross Domestic Product declined from 6.45 per cent in 2007

to 5.99 per cent when the crisis set in 2008. The realized output was far below the 10 per cent annual target for 2008. Consequently, the real gross capital formation fell by 54 per cent between 2007 and 2008. However, total output improved in 2009 with a growth rate of 6.6 per cent. The adverse effect of the crisis on the GDP had greater impact on the agriculture, industry and wholesale sub-sectors. The building and construction sub sector did not appear to have been adversely affected as it grew marginally in the period.

The level of liquidity available for real sector activities was also hard hit by the global financial crisis. The domestic credit (net) to the economy grew by 276 per cent in December 2007 over the preceding December. However, in the last auarter of 2008, the effect of the crisis was a reduction in the growth of credit to the economy to 84.2 per cent over the preceding December. When compared with the growth in December 2007, total credit (net) declined by 216.79 percentage points in 2008. By end-2009, the credit situation had worsened with a credit growth rate of 59.61 per cent over the level in December, 2008.

4. Interventions by the Central Bank of Nigeria to grow the Real Sector after the Crisis

he real sector engages in the production of goods and services through the utilization of raw materials and other factors of production. Traditionally, it includes agriculture, manufacturing, mining and quarrying, building/construction and services. The real sector is organized around two main markets namely; the factor market and the product market. In the factor market, inputs for production are purchased - labour is hired, land is rented or bought, capital is purchased or leased, and the services of the entrepreneur are engaged. Therefore, it is the factor market that determines the employment level and the various rewards to factors of production.

Generally, in a competitive factor market, the reward to factors of production will coincide with their marginal productivities. In the product market, the outputs of the real sector are exchanged. The market determines the price at which outputs are sold and bought. Usually, the supply price would factor the cost of inputs, per unit with a margin of profit which is the reward for enterprise.

Over time, the production function could shift leftward or rightward. A rightward shift in the production function signifies an increase in the level of total output in the real sector. The shift is usually as a result of variations in some factors or a combination of factors. Most notably, technological progress, powered by innovation through research and development, the discovery of new natural resources, and favourable terms of international trade which grows domestic national income are factors which contribute to the growth of the real sector. So long as the real sector grows, the objectives of government policy would mainly centre on stemming wide volatilities in supply and steadying the variability of aggregate prices, with the ancillary goal of ensuring equitable distribution of resources

A leftward shift in the production function points to a decline in the level of output in the real sector. This could arise from obsolescence in production techniques, deteriorating labour skills, inclement weather, especially, for climate based production processes, and sheer disinclination to work, which is usually a direct consequence of rent seeking tendencies among the workforce. It is the decline in the output of the real sector, overtime, which necessitates various intervention measures by government in the bid to restore original output and enhance further growth.

The interventions by the Central Bank of Nigeria to fix the real sector after the crisis have leaned on the

ideology that strict market orientation failed to deliver adequate credit to the sector owing to the numerous competitive disadvantages in the sector, especially poor infrastructure and operatina capacity. Therefore, the new paradigm favours direct delivery of credit as distinct from passing through the traditional interest rate channel of monetary policy transmission. Some of the interventions include the power and airline intervention fund, Refinancing and Restructuring of Banks' Loans to the Manufacturing Sector, Small and Medium Enterprises (SMEs) Credit Guarantee Scheme (SMECGS), Commercial Agricultural Credit Guarantee Scheme (CACS). The interventions are presented below highlighting all their salient features including sources of financing, eligibility criteria and modes of operation

1. N300 BILLION POWER AND AIRLINE INTERVENTION FUND (PAIF)

The CBN approved the sum of N300 billion in a debenture which has been issued to the Bank of Industry (BOI) for disbursement into the Power and Aviation Industries and is expected to help sustain private sector investment. All Deposit Money Banks (DMBs) and Development Finance Institutions (DFIs) can participate, while the Africa Finance Corporation (AFC) is to serve as the Technical Adviser of the Fund. In summary, the key players in the operation of the Fund include;

The CBN - provided the guidelines/ funds for implementation of the Fund;

The BOI was expected to manage the Fund, issue debenture and render periodic returns on the performance of the Fund to the CBN:

The AFC was expected to provide technical support, reviews projects to confirm eligibility and build capacity of stakeholders;

The Participating Banks (PBs) included the DMBs and the DFls, which grant credit facilities, ensure timely disbursement of funds and monitor projects; and

The Borrowers (Power and Aviation industries) - they utilize the fund and ensure strict compliance to the terms and conditions of the loan.

The key objectives of the Fund were to (CBN Guidelines):

- Fast-track the development of the aviation sector and power projects;
- ii. Serve as a credit enhancement instrument for the financiers (the DMBs DFIs);
- iii. Improve power supply, generate employment and enhance living standards; and
- iv. Provide leverage for additional private sector investments in these sectors.

The eligibility criteria for the Fund include:

- i. Corporate entities registered in Nigeria and involved in power generation, transmission, distribution, fuel supply and similar services.
- ii. Projects can be promoted by private or public sector sponsors but must be structured either as profitoriented businesses or public services provided financing support exist to ensure repayment of principal and interest in addition to long-term viability.
- iii. Already existing projects in terms of operation, construction or operationally inactive.
- iv. For airlines, it should be duly incorporated under the Companies and Allied Matters Act (CAMA) of 1990 and operating in Nigeria.

Types of Facilities include long term loans (for only new Power projects), refinancing of existing loans, refinancing of existing leasing (for Power and Airline projects) and working capital (for only existing Power and Airline projects).

Financial Terms:

Tenor: 10 15 years

Moratorium: Allows for moratorium which depends on the type and nature of project that is either the construction period or the time required to complete the project, though additional periods may be approved.

Interest Rate: 7% per annum, payable quarterly, out of which 1% would be remitted to BOI.

Maximum Facility Available (% of Project Cost): 70% for Power projects and 60% for Airline projects.

Refinancing: The Fund will provide refinance for existing term loans for commercially viable Power and up to 100% of the loans granted for Airline projects. The tenor of refinancing will also be 10 15 years. Penalty for Default: In case of default, the financiers have the right to charge commercial interest rate on the amount in default. If on the other hand the financiers default by failing to disburse received funds to the borrowers, it shall be subject to a penalty to be decided by the CBN.

Professional/Consultant Fees: Grossed up and included in the total project cost to be refinanced. The application procedure is as follows:

- i. Submission of request:
 Participating Banks (PBs) shall
 submit requests on its behalf
 (or on behalf of other parties
 in the case of syndication). In
 the case of syndication, the
 BOI shall deal directly with the
 lead bank only on issues
 relating to such applications.
- ii. Documentation: Each request should include the following request letter, last 3 years financials of an existing

company, feasibility studies of the project, relevant permits/approvals, relevant agreements, environmental impact assessment, copies of duly executed offer documents, 6 months account statements, certificate of incorporation with the Corporate Affairs Commission (CAC), list of directors of the company and any other relevant document.

- iii. Processing period: The BOI shall process all applications within 5 days and forward it to the AFC which shall appraise such applications and forward same to the BOI within 20 working days of receipt. The BOI shall inform the participating bank of the status of its application not later than 5 working days after the receipt from the AFC.
- iv. Approval process/Onlending agreement: Successful applications shall be forwarded to the Management of the CBN for final approval. An on-lending agreement will then be signed between the BOI and each PB.
- v. Security to be offered by PBs: This shall be in form of a bank guarantee backed by payment order for the PBs account to be debited by the CBN in case of any default; legal agreement between the BOI and PB for the BOI to have right the realization of security pledged by power project promoters; and the BOI to have lien on the cash flow of Power projects.
- vi. Release of funds: The BOI is expected to credit the PB with the amount due within 3 working days of receipt of the payment order, while the PB is expected to disburse these funds to the borrowers in line

with the terms and conditions of their request not later than 2 working days of receipt of funds from the BOI.

2. N200 BILLION INTERVENTION FUND FOR RE-FINANCING AND RESTRUCTURING OF BANKS' LOANS TO THE MANUFACTURING SECTOR

The CBN approved the sum of N200 billion to refinance/restructure banks' existing loan portfolios to the Nigerian Small and Medium Scale Enterprises (SME)/Manufacturing sector.

In summary, the key players in the operation of the Fund include;

The CBN - provides the guidelines/funds for implementation of the Fund;

The Organized Private Sector Associations (OPSA) - These include associations such as MAN, etc. They are to accredit who benefits from the fund and ensure prompt repayment of loans;

The BOI; expected to issue debentures and manage the Fund;

The Participating Banks (PBs); these include the DMBs and the DFIs which grant credit facilities, approve requests, monitor projects and collaborate with the Organized Private Sector Associations; and

The Borrowers (Nigerian SME/Manufacturing Sector); they utilize the fund and ensure strict compliance to the terms and conditions of the loan.

The objectives of the Fund were to (CBN Guidelines):

- Fast-track the development of the manufacturing sector through increased access to credit;
- ii. Improve the financial position of DMBs; and
- iii. Increase output, generate employment, diversify the

revenue base, increase foreign exchange earnings and provide inputs for the sector.

The eligibility criteria for the Fund include:

- i. Manufacturing restricted to entities involved in the production and processing of tangible goods, and entities that fabricate, deploy plants/machinery/ equipment to deliver goods or provide infrastructure to facilitate economic activity in the real sector, which are not involved in the financial services industry;
- ii. SMEs (entities with an asset base, excluding land, of between N5 million to N500 million and labour force of between 11 and 300;
- iii. Entities wholly-owned and managed as Nigerian private limited company and registered under CAMA 1990;
- iv. A legal business operated as a sole proprietorship;
- v. Member of the relevant OPSA; and
- vi. Trading activities shall not be accommodated under this Fund.

Types of Facilities include long term loans for acquisition of plant and machinery, refinancing of existing loans, refinancing of existing lease, resuscitation of ailing industries and working capital.

Financial Terms:

Loan Amount: Maximum of N1 billion for a single obligor in the case of refinancing/restructuring

Tenor: Maximum of 15 years or working capital facility of 1 year

Moratorium: Allows for moratorium.

Interest Rate: 7% per annum, payable quarterly, out of which 1% would be remitted to BOI.

Mechanism for Refinancing/ Restructuring for the Fund:

- i. Submission of request: The BOI sends out notice to all PBs for submission of refinancing/restructuring requests, which in turn submit requests within 14 days of notice.
- Documentation: Each request should include the following - request letter; latest financials; copies of duly executed offer documents between the bank and the loan obligor evidencing the existence of a facility; a feasibility study/business plan; 6 months account statements; certificate of incorporation with the Corporate Affairs Commission (CAC); a letter of commitment indicating that the requesting bank shall on or before 31st December 2010 book new loans to the manufacturing/SME sectors in an amount not less than 50% of the among accessed under the Fund.
- iii. On-lending agreement: An on-lending agreement will be signed between the BOI and each bank.
- iv. Processing period: The BOI shall inform the banks of the status of their application within 7 days of the receipt of requests. On the receipt of funds from the CBN, the BOI shall require each bank to pledge securities with face value of not less than 100% of its specified refinanced amount.
- v. Eligible Securities: They include Treasury Bills, FGN Bonds, Other Bonds backed by the guarantee of the Federal Government, and any other securities acceptable to the CBN.
- vi. Disbursement process: The BOI within 24 hours of receipts

- of the pledge shall credit each bank with the amount allocated to them. The banks are to apply the funds by restructuring and/or refinancing the stated accounts in line with the terms and conditions of their requests within 48 hours.
- vii. Verification/Monitoring of Projects: Projects are subject to verification by the BOI and acceptance/rejection communicated to the PB and borrower within 14 days after verification.
- 3. N200 BILLION SMALL AND MEDIUM ENTERPRISES (SME) CREDIT GUARANTEE SCHEME (SMECGS)

As part of its developmental role, the CBN established the SMECGS in order to enhance access to credit by the SMEs in Nigeria.

In summary, the key players in the operation of the Fund include;

The CBN - provides the guidelines/funds for implementation of the Scheme and act as the managing agent of the Scheme;

The Organized Private Sector Associations (OPSA) - These include associations such as MAN, etc. They are to accredit who benefits from the fund and ensure prompt repayment of loans;

The Participating Banks (PBs); these include the DMBs and the DFIs which grant credit facilities, approve requests, monitor projects and collaborate with the Organized Private Sector Associations; and

The Borrowers (Nigerian SME); they utilize the fund and ensure strict compliance to the terms and conditions of the loan.

The objectives of the Fund are to (CBN Guidelines):

 Fast-track the development of the manufacturing sector

- by providing guarantee for credit from banks;
- ii. Set the pace for industrialization of the economy;
- iii. Increase access to credit;
- iv. Increase output, generate employment, diversify the revenue base, increase foreign exchange earnings and provide inputs for the sector.

The activities to be covered within the Scheme include:

- i. Manufacturing;
- ii. Agricultural Value Chain;
- iii. Educational Institutions;
- iv. Any other activity as may be specified by the CBN from time to time;
- v. Trading shall not form part of such activities; and
- vi. SME include enterprises that have asset bases (excluding land) of between N5 million to N500 million and labour force of between 11 and 300.

Borrowers are to meet the following eligibility criteria:

- i. Entities falling within the definition of SME;
- ii. Entities wholly-owned and managed as Nigerian private limited company and registered under CAMA 1990;
- iii. A legal business operated as a sole proprietorship;
- iv. A start-up company with satisfactory cash flows indicating a Fixed Asset cover ratio of 100:150; and
- v. A Franchise.

Financial Terms:

Tenor: Maximum of 7 years or working capital facility of 1 year

Moratorium: Allows for moratorium. Interest Rate: The Prime Lending Rate (PLR) of the PBs.

Collateral: Realizable and acceptable to the PBs.

Procedure for Applying for the Scheme:

- i. Submission of Applications: All applications should be made directly to the PB accompanied with the necessary documents for the processing of loans.
- ii. Documentation: The PBs are expected to apply the same degree of due diligence and professionalism as in the normal course of banking business.
- iii. Processing period:
 Applications should be processed promptly and the period elapsing between the submission of an application and requisite documents for appraisal under the Scheme and its approval/rejection should not exceed 60 days.
- iv. Verification/Monitoring of Projects: Projects are subject to verification by the CBN and acceptance/rejection communicated to the PB and borrower within 14 days after verification.

4. THE COMMERCIAL AGRICULTURAL CREDIT GUARANTEE SCHEME (CACS)

he CBN in collaboration with the Federal Ministry of Agriculture and Rural Development (FMA&RD) established the Commercial Agriculture Credit Scheme (CACS) in enhance commercial agricultural enterprises in Nigeria. This is also expected to complement other special initiatives of the CBN in the agricultural sector, such as the Agricultural Credit Guarantee Scheme (ACGS), Agricultural Credit Support Scheme (ACSS), etc. The Scheme is expected to be funded from the proceeds of the N200billion seven (7) year bond raised by the Debt Management

Office (DMO). The single obligor for any project from a PB under the Scheme is N2 billion and for each State Government N1.0billion.

The key players in the functioning of the Scheme include; Federal Government of Nigeria

(FGN) - issuer of the Bond, CBN- Specify the interest rate,

CBN- Specify the interest rate, absorb the subsidy/incidental and administrative expenses which may arise in the pricing of the loan, select PBs and release funds to them, conduct spot audit on the PBs, prepare monthly reports to the National Economic Council (NEC), TIC and PSC and serve as the Chairman of the TIC. Federal Ministry of Agriculture and Rural Development (FMA&RD) -Monitoring and evaluating the Scheme as well as serving as the secretary of the TIC and PSC. Debt management Office (DMO) - Issue the Bond on behalf of the FGN

Participating Banks (PBs) - Ensure due diligence is adhered to in the administration of credit facilities, guarantee safety and purposeful application of funds, submit to the CBN Letter of Offer by the bank, Letter/Evidence of Acceptance by the state, ISPO, List of State Cooperatives or Evidence of Intervention project, Disbursement/Repayment schedules, the Credit Risk Management System (CRMS) report of the borrower; and render monthly returns to the CBN.

Borrowers They utilize the funds for the purpose for which it was granted and adhere strictly to the terms and conditions of the Scheme.

The committees set-up to ensure the smooth running of the programme include;

The PSC - Shall be responsible for the overall administration of the Funds and Scheme. The PSC comprises of the Honourable Minister of FMA&WR, the Governor of the CBN and a representative each from the Federal Ministry of Finance and

Commercial Farmers and the Programme Coordinator.

Technical Implementation Committee (TIC) - Ensure the day-to-day implementation of the Scheme. The TIC comprises of the Director of the Development Finance Department (DFD) of the CBN, the Head of the Agriculture Credit Support Division of the DFD, CBN and the Programme Coordinator.

The major objectives of the Scheme include (CBN Guidelines);

- i. Fast tracking the development of the agricultural sector of the economy by providing credit facilities to commercial agricultural enterprises at a single digit interest rate;
- ii. Enhancing national food security by increasing food supply and low product prices;
- iii. Reducing the cost of credit in agricultural production; and
- iv. Increase output, generate employment, diversify the revenue base, increase foreign exchange earnings and provide inputs for the sector.

The key agricultural commodities/ enterprises to be covered under the Scheme include;

Production - these include cash crops, food crops, poultry, livestock and aquaculture;

Processing - these include feed mills development, threshing, pulverization and other value addition processes;

Storage - these include commodities, agro-chemicals and warehousing;

Farm input supplies - these include fertilizers, seeds/seedlings, breeder stock, feeds, farm equipments and machineries;

Marketing - these are agricultural commodities under the focal investment areas; and

Commercial Enterprise - include any farm or agro-based enterprise with agricultural asset (excluding land) of not less than N100 million for an integrated farm with prospects of growing the assets to N250 million within the next three years and N50 million for non-integrated farms/agro-enterprise, except in the case of on-lending to farmers' cooperative societies.

The following are eligible to participate in the Scheme:

- i. All DMBs;
- ii. Corporate and Large Scale Commercial Farms/Agro-Enterprises;
- iii. Medium Scale Commercial Farms/agro-Enterprises; and
- iv. State Government/FCT.

Financial Terms:

Tenor: Maximum of 7 years or working capital facility of 1 year

Moratorium: Allows for moratorium.

Interest Rate: 7% per annum, inclusive of all charges.
Collateral:

- A charge on land in which the borrower holds a legal interest or a right to farm, or a charge on the land including fixed assets, crops or livestock;
- ii. A charge on the movable property of the borrower;
- iii. A life insurance policy, a promissory note or other negotiable security;
- iv. Stocks and shares; and
- v. Any other collateral acceptable to the PBs.

Procedure for Applying for the Scheme:

Corporate and Large Scale Commercial Farms/Agro-Enterprises

- i. Must be a limited liability company with an asset base of not less than N100 million and having the prospect to grow the net asset to N250 million within the next 3 years and complies with the provision of the Company and Allied Matters Act (1990);
- ii. Have a clear business plan/feasibility study;
- iii. Provide up-to-date record on the business operation;
- iv. Have out-growers programme, where appropriate; and
- v. Satisfy all the requirements specified by its lending bank.

Medium Scale Commercial Farms/garo-Enterprises

- i. Be a limited liability company with asset base of not less than N50million and having the prospect to grow the net asset to N150 million in the next three years and complies with the provision of the Company and Allied Matters Act (1990);
- ii. Have a clear business plan/feasibility study;
- iii. Provide up-to-date record on the business operation;
- iv. Have out-growers programme, where appropriate; and
- v. Satisfy all the requirements specified by its lending bank.

State Government/FCT

- i. Submit an expression of interest:
- ii. Present an Irrevocable Standing Payment Order (ISPO) in favour of the PB, duly signed by the State Governor, Commissioner for Finance and the State Accountant General;
- iii. Adhere to the repayment

- agreement reached with the PB and in case of default, the CBN will invoke the ISPO;
- iv. Set up structures for the deployment of the funds, which must include existing, registered Cooperative Societies/Unions which are at least 6 months old with proven trackrecords of repayment;
- v. Deploy CACS funds disbursed to farmers' cooperative societies and other areas of agricultural development provided such initiatives/interventions are in line with the objectives of CACS; and
- vi. Satisfy all the requirements specified by the lending Bank.

5. NIGERIAN INCENTIVE-BASED RISK SHARING SYSTEM FOR AGRICULTURAL LENDING (NIRSAL)

he CBN in collaboration with the Alliance for a Green Revolution in Africa (AGRA) are to develop an innovative mechanism for financing agriculture, especially for smallholder farmers, agroprocessors, agribusinesses and input suppliers in the agricultural value chain in order to boost agricultural production. The CBN and AGRA are to work with UNIDO and other key stakeholders in the country to develop this mechanism, which is expected to improve access to bank finance and provide farmers with affordable financial products, while reducing the risk of loans under similar existing financing programmes. The unique feature of this scheme is that it will adopt a value chain approach to lending and banks would be free to choose which part of the chain they prefer. NIRSAL is expected to be launched with \$500 million.

The objectives of the this initiative includes;

 Building capacities of banks to expand lending to agriculture,

- 2. Pooling the current resources in the CBN's agricultural financing schemes and other investor funds and transferring them into the different components of the programme.
- 3. Assessing, modifying and integrating the existing financing and insurance schemes.
- 4. Making lending by banks to the agricultural sector attractive.
- 5. Building the capacity of banks to better understand agricultural lending and increasing the outreach of the banks to rural areas by developing efficient financial delivery systems.

NIRSAL has five integrated components which include:

The Risk Sharing Facility (RSF) Portfolio guarantee and leveraging up to \$3 billion.

The Insurance Component (IC)

Technical Assistance Facility

(TAF) Development of insurance products, capacity building, enhancement of production efficiency and knowledge and innovation centre

Bank Incentive Mechanism (BIM) Reduction of own funds requirements

Agricultural Bank Rating System (ABRS) Rating based on bank engagement level and provided by independent institutions.

Assessment of the Impact of the various interventions

These various bailout funds by the CBN were intended to improve the real sector of the economy. Specific effects of these interventions in the real sector are expected to be felt over time, as it is too early to assess their impact on the economy. However, from inception, the total sum of N131.49 billion has been disbursed to 148 beneficiaries made up of 122 individuals/ private promoters and 26 State Governments under the CACS. Also, at end-June 2011, a total of N197.60 had been released under the Scheme to the Bank of

Industry (BOI) for disbursement to various projects. The design process for NIRSAL has so far been completed and currently, the implementation process is in progress with the creation of the Project Implementation Office in the Development Finance Department of the CBN. The framework for the operation of the NIRSAL is currently being built.

5. Conclusion

he paper has presented some of the effects of the recent global financial crisis on the real sector of the Nigerian economy and shown some of the major interventions by the central bank of Nigeria. The interventions have mainly been of non-market forms which make access to finance for the sector relatively easier. Although it is early to judge the performance of these interventions, there are visible signs that the real sector has been set on the direction of recovery. Also, the NIRSAL programme provides a sustainable avenue for agricultural financing in which all other agricultural financing schemes, going forward, would be pooled under and managed outside the public sector.

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BOARD OF GOVERNORS

Sanusi Lamido Sanusi - Governor

(Chairman)

Tunde Lemo - Deputy Governor

(Operations)

Sarah Alade - Deputy Governor

(Economic Policy)

Suleiman Barau - Deputy Governor

(Corporate Services)

Kingsley Moghalu - Deputy Governor

(Financial System Stability)

