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EXTERNAL RESERVES MANAGEMENT AND UTILIZATION: NIGERIA EXPERIENCE

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1.0 Introduction

External reserves management is one of the core mandates of the Central Bank of Nigeria (CBN). Section 2 sub-section (c) of the CBN Act 2007 states that the Bank shall "maintain external reserves to safeguard the international value of the legal tender currency". This is aimed at supporting a broad range of national objectives, which cut across the four sectors of the Nigerian economy, such as maintaining confidence in the country's monetary and exchange rate policies and providing confidence of the international community on the country's ability to meet its external obligations.

In keeping with these objectives, the strategy of external reserves management in Nigeria has been considerably transformed in the last decades in order to meet the growing challenges of changing global financial environment and volatile oil market. Prior to 2001, when the level of external reserves was low, the CBN used passive reserves management strategy, mainly investing in treasury bills, overnight funds placements, reverse repo, call account and deposit placements with a few counterparties. With the increase in the level of reserves and dwindling returns from traditional sources of investments, the Bank took a number of steps to enhance the efficiency of its reserve management operations and returns. The steps include the review of the institutional and governance structure for reserve management, engagement of external asset managers to actively manage a portion of the reserves, diversification of the internally managed portfolio to include fixed income securities and development of a Strategic Asset Allocation (SAA) to improve the long term returns on the reserves portfolio, among others.

The objective of this paper is to appraise developments in external reserves management and utilization in Nigeria, with a view to identifying major challenges and proffering solutions. The paper is divided into six sections. Following this introductory section, section two reviews some of the major conceptual and analytical issues on external reserves management and utilization, while section three discusses Nigeria's external reserves management process. Section four appraises developments in external reserves management and utilization, as well as examines the impact of external reserves on the four sectors of Nigerian economy. Section five highlights major challenges in external reserves management and utilization in Nigeria, while section six concludes the paper and provides some policy recommendations.

2.0 Some Conceptual and Analytical Issues

2.1 External Reserves

External reserves, also known as international reserves, foreign reserves or foreign exchange reserves, have been defined by the IMF (2009) as:

...those external assets that are readily available to and controlled by monetary authorities for meeting balance of payments financing needs, for intervention in foreign exchange markets to affect the currency exchange rate, and for other related purposes (such as maintaining confidence in the currency and the economy, and serving as a basis for foreign borrowing).

What distinguishes external reserves assets from other foreign currency assets is that they consist of liquid or easily marketable foreign currency assets, held in the form of convertible foreign currency claims of the monetary authorities on non-residents.

Nevertheless, ownership is not the only condition that confers control of external reserves to the monetary authorities. External assets held by other institutional units in the reporting economy that hold legal title to such external foreign currency assets, but are permitted to transact in such assets only on terms specified by the monetary authorities or only with their express approval, are also considered as part of external reserves. For example, assets under sovereign wealth fund managed by institutions (independent of the central bank) can be classified as external reserves, if the institution managing these assets is permitted to transact in such assets only on terms specified by the monetary authorities or only with their express approval.

To be counted as external reserve assets, the conditions to be met are that:

- the resident entity can transact only in those claims with non-residents on the terms specified by the monetary authorities or only with their express approval;
- authorities have access on demand to these claims on non-residents to meet balance of payments financing needs and other related purposes; and
- a prior law or an otherwise legally binding contractual arrangement confirms this agency role of the resident entity that is actual and definite in intent.

2.2 Motives for Holding External Reserves

There are different motives for holding external reserves by different countries. Bario et al. (2008) identified six major classes such as the need to:

- Intervene in the foreign exchange market to maintain exchange rate stability;
- Pay for goods and services imported from abroad;
- Grant emergency liquidity assistance to the economy, especially the banking sector;
- Provide confidence in the country's ability to meet its external obligations;
- Assist government in meeting its foreign exchange obligations; and
- Support domestic monetary policy to manage liquidity through foreign exchange swaps, etc.

2.3 Reserves Management Strategies

In spite of their similarity, central banks adopt different approaches to external reserves management. These are classified into three: indexation, active management and enhanced indexation. The decision to adopt a particular strategy depends on the central bank's particular circumstances, capacity of portfolio managers as well as internal procedures and systems to control financial and operational risks.

Indexation strategy aims to replicate a benchmark with a very low tracking error. The strategy provides very little discretion to portfolio managers as it involves buying foreign currency assets and holding them to maturity.

Also, the portfolio managers regularly rebalance their foreign currency portfolios to replicate a benchmark such as a market standard benchmark.

Active management (or tactical trading), on the other hand, denotes deviating from the benchmark with a view to outperforming it (or earning excess returns). An active management framework gives portfolio managers scope to change positions in the expectation of market developments. This style therefore requires staff who are skilled in investment operations, comprehensive investment management process, and portfolio and risk management systems and processes.

Enhanced indexation combines aspects of passive and active management. It enables investors to take advantage of short-term market opportunities, thus allowing for minor mismatches in the risk factors. It also tilts the portfolio in favour of particular areas of relative value (sector, quality, term structure). However, because mismatches are minimal, it is still considered a form of indexation. Enhanced indexation helps sharpen portfolio manager's trading skills and facilitates the central bank's ability to monitor the external managers.

2.4 Currency composition of reserves

Given that a country carries out transactions with different countries and in different currencies, its external reserves are expected to be held in different currencies. According to Yuguda (2011), "choosing appropriate currency composition for reserves is an important decision .... because currency risk typically constitutes a significant part of the total market risk on reserve holdings". The currency composition is thus dictated by the following:

- Currency of intervention in the country's foreign exchange market;
- Currency of net imports;
- Currency used for debt payments; and
- Dividend transfers overseas by resident foreign companies.

As a result, the United States dollar is the dominant currency in Nigeria's external reserves, followed by the euro and the Great Britain pound sterling.

3.0 Issues in External Reserves Management in Nigeria

External reserves management in Nigeria is largely driven by the need to maintain confidence in the country's monetary and exchange rate policies; provide confidence to the international community that the country is able to meet its external obligations; maintain foreign currency liquidity during periods of external shocks; and assist government to meet its foreign exchange obligations. To this end, external reserves management is tailored towards achieving the objectives of preservation of capital, maintenance of adequate liquidity and maximization of returns within tolerable risk limits (consistent with the benchmark). The objective of preservation of capital reflects the CBN's desire to maintain the purchasing power of the reserve assets as well as to avert risk. The provision of adequate liquidity is required to ensure that reserves are readily available for financing day-to-day official transactions and meeting unforeseen needs, while the maximization of returns objective helps the CBN to generate sufficient revenue to meet its operating costs.

3.1 Composition of External Reserves in Nigeria

The CBN Act of 2007 provides that the Bank shall maintain a reserve of external assets consisting of all or any of the following:

- Monetary Gold coin or bullion;
- Balances at banks outside Nigeria where the currency is freely convertible;
- Treasury bills having a maturity not exceeding one year issued by the government of any country outside Nigeria whose currency is freely convertible;
- Securities of, or guarantees by, a government of any country outside Nigeria whose currency is freely convertible and the maturity of securities not exceeding ten years from the date of the acquisition;
- Securities of, or guarantees by international financial institutions of which Nigeria is a member, if such securities are expressed in currency freely convertible and maturity of the securities not exceeding five years;
- Nigeria's Reserve position in the International Monetary Fund (IMF); and
- Allocation of Special Drawing Rights (SDR) made to Nigeria by the IMF.

As such, the CBN holds external reserves in a combination of the above mentioned assets.

3.2 Institutional Structure for External Reserves Management in Nigeria

The overall responsibility for formulating external reserves management policy rests with the CBN Board of Directors. According to Yuguda (2003), the Board's responsibilities in this regard include:

- Annual review of the investment policy;
- Annual review of performance of the external reserves portfolio; and
- Establishing the content, form and frequency of communiqués to the public regarding the management of external reserves, for the purpose of transparency.

The Board delegates the responsibility for the oversight of external reserves management operations to its Investment Committee. The Committee is entrusted with the responsibilities to:

- Approve the benchmark portfolio;
- Approve the risk budget or loss limit;
- Approve the investment guidelines;
- Approve internal operating procedures;
- Ensure that an adequate internal environment exists for proper reserves management;
- Ensure appropriate segregation of duties between portfolio management, compliance, settlement, and accounting;
- Ensure compliance with the risk limits and other restrictions in the guidelines; and
- Appoint external managers.

3.3 Ownership Structure of the Reserves

Nigeria's external reserves are jointly owned by the Federation, the Federal Government and the CBN. The Federation portion of the reserves consists of the sterilized funds belonging to the three tiers of government, but yet to be monetized. The funds are sourced mainly from excess crude and excess petroleum profit tax, and managed by the CBN in fixed term deposits, with a maximum tenor of 3-months. They belong to the three tiers of government: Federal, State and Local governments.

The Federal Government portion consists of funds belonging to the Federal Government and its

Agencies such as the Nigerian National Petroleum Corporation (NNPC), Ministry of Defense, and Power Holding Company of Nigeria (PHCN), among others. They are meant for specific purpose such as Joint Venture Cash Calls (JVC), Niger Delta Projects, Independent Power Projects (IPPs) and external debt payments, among others. The CBN portion, which is the largest, consists of foreign currency proceeds of crude oil sales that had been monetised (CBN, 2009).

3.4 CBN Foreign Exchange Reserves Portfolio Structure

The CBN portion of the reserves is managed to achieve a broad range of macroeconomic objectives. It is, therefore, geared towards achieving the three objectives of capital preservation, liquidity and return. The CBN portion is divided into three tranches: Liquidity, Investment and Stable, under the Strategic Asset Allocation (SAA) with a view to providing for the day-to-day liquidity needs of the Bank, providing a buffer for liquidity tranche, and the portion outsourced to external asset managers. Each tranche has its own benchmark reflecting a particular aspect of the reserves management objectives.

The Liquidity Tranche is used to manage known and highly anticipated foreign currency cash payments and inflows as well as cash positions arising from day to day reserves management activities. The Investment Tranche holds assets designed to meet contingent demands for foreign exchange liquidity. Its benchmark has greater duration than the Liquidity Tranche. It comprises deposits, repurchase agreements, and short-term government securities. The Stable Tranche is designed to contribute most to the overall returns objectives for the entire reserves portfolio. Consequently, its benchmark has longer duration than the other tranches, and it comprises mostly longer dated government securities. This tranche is dominated by funds outsourced to external asset managers.

4.0. Appraisal of Developments in External Reserves Management and Utilization

Appraisal of alternative reserves management strategies and their respective implications for reserve adequacy are facilitated by a cost/benefit analysis of holding reserves. Such analysis aims to place values on the costs and benefits of holding more or less reserves, for example, by weighing the costs of holding more reserves against the expected benefits of less volatile capital flows, increased foreign investor confidence, and reduced risk of contagion.

To this end, reserves management process is constantly being transformed and improved in line with the changing investment world and improvements in information and communication technology. In carrying out the appraisal of Nigeria's external reserves management, developments in reserves management strategy are analyzed, while the uses and impact of external reserves on the various sectors of the economy are analyzed.

4.1 Developments in External Reserves Management Strategy

External reserves management strategy in Nigeria has evolved from purely cash management, with reserves held in foreign bank accounts and deposit placements with few counterparties to a diversified portfolio which includes sovereign, supranational and United States (US) agency securities. In addition, the governance structure has been strengthened with the constitution of an Investment Committee. There is also the development of Investment Policy and Guidelines and the appointment of Global Custodian and External Asset Managers.

Operationally, the Bank has moved from purely manual to automated operations, using Wall Street Suite Reuters dealing system for portfolio management. These have automated reserves management operations from trade capture to settlement and accounting. Bloomberg has also been installed in the bank for data capturing and market monitoring. These developments have increased the effectiveness and efficiency in reserves management by reducing the time involved in effecting various trade deals. In terms of personnel, there is an improvement in capacity building through the engagement of, and training received from the Bank's counterparties. There has also been some reduction in the risk profile of the reserve assets due to diversification from purely deposits to other forms of assets.

4.2 Uses and Impact of External Reserves on the Various Sectors of the Nigerian Economy

There are basically four main sectors in an economy. These are the real, government, external and monetary sectors (IMF Institute, 2006). Analysis in this section is focused on the utilization and impact of external reserves on these sectors.

4.2.1 Monetary Sector

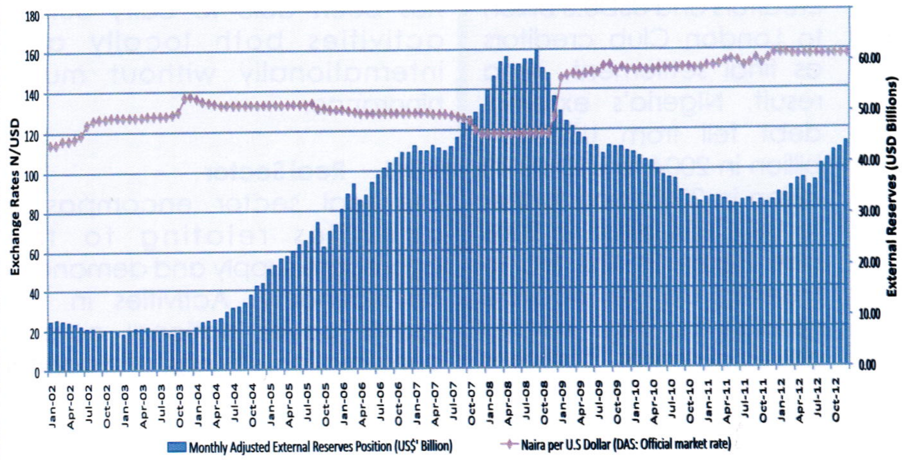
The monetary sector refers to the organ of the economy that provides financial services, with the central bank at the apex. It includes other players and regulators that direct the flow of money and credit within an economy. It also implements monetary and credit policy decisions for the maintenance of price and monetary stability. Thus, the monetary sector utilizes external reserves for:

- Intervention in the foreign exchange market to achieve exchange rate stability: The CBN draws on external reserves to defend the value of the local currency in the foreign exchange market. This is done through interventions in the foreign exchange market and sales to Bureau-de-Change (BDCs) to meet foreign exchange demands in the local market. Over the years, the Naira exchange rate has been successfully managed within a band of +/- 3.0 per cent as shown in Figure 1.

- Price stability: Ensuring monetary and price stability is another major function of the CBN. The conduct of monetary policy which entails maintenance of price stability falls under the purview of monetary authorities. In achieving this, the CBN uses an array of instruments including foreign exchange market interventions. The Bank thus uses its external reserves to mop-up excess liquidity through the foreign exchange market. This controls money supply within the economy and thus ensures that there is no liquidity pressure to force prices up. As shown in Figure 2, inflation rate has been relatively stable and low since 2004.

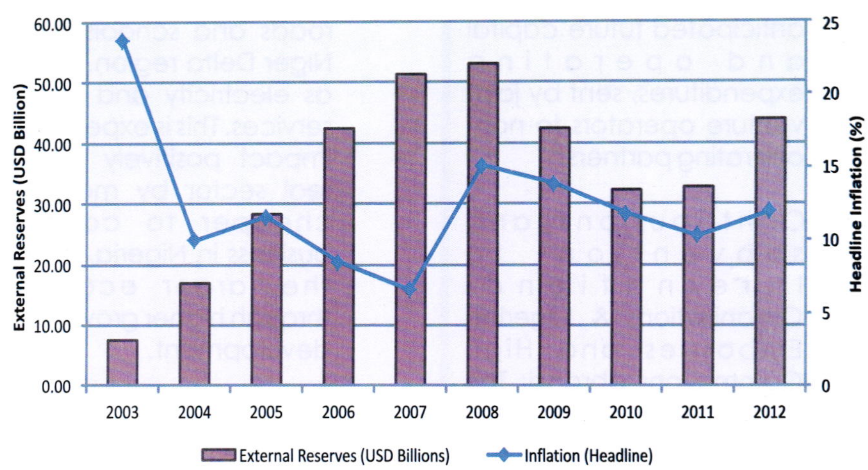
- Promotion of country's international credit rating. The maintenance of robust external reserves has increased the country's credit rating and international community's confidence that the country could meet its international obligations. Currently, Nigeria is rated BB-, though the Fitch Rating Agency had recently lowered Nigeria's sovereign credit outlook

Figure 1
Trends in External Reserves/ Exchange Rates



Source: *Central Bank of Nigeria (Statistics Department)*

Figure 2
Trends in External Reserves/Inflation



Source: *Central Bank of Nigeria (Statistics Department)*

from stable to Negative due to the depletion of excess crude account and heightened security issues. The establishment of Nigeria Sovereign Investment Authority is expected to protect oil windfall savings which would lead to a more fiscally prudent budget implementation and improvement in the Nigeria's credit rating.

4.2.2 Government (Fiscal) Sector

The government or fiscal sector refers generally to (central plus state or provincial and local) government or the public sector operations, depending on which coverage is the focus of policy and analysis in a particular country. The fiscal operations deal with government revenue, expenditure and debt. The government sector, thus, utilizes external reserve assets for activities such as:

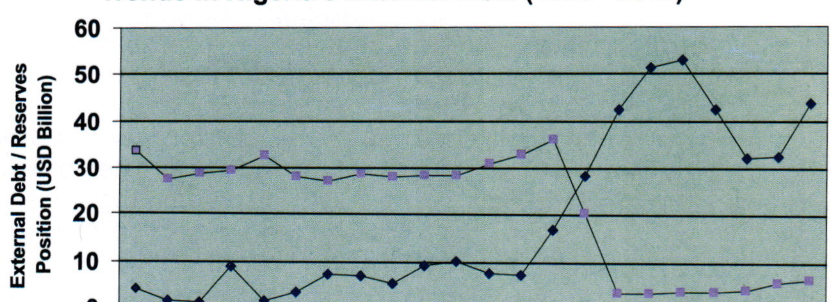
- Debt service: This is one of the major uses of external reserves in Nigeria. In 2006, a major milestone was reached when part of Nigeria's debt was forgiven by its major international creditors, following the payment of the sum of USD12.4 billion to Paris Club creditors and USD0.5 billion to London Club creditors as final settlement. As a result, Nigeria's external debt fell from USD35.94 billion in 2004 to USD 20.48 billion in 2005, and further to USD 3.54 billion in 2006 (see Figure 3). This led to freeing-up of scarce reserves for other developmental purposes and for boosting of the country's credit rating and credibility.

- Joint Venture Cash (JVC) Call payments: External reserves are used for the payment of JVC calls, which were payments for anticipated future capital and operating expenditures, sent by joint venture operators to non-operating partners.

- Contributions and subventions to International Organizations & Nigerian Embassies and High Commissions abroad: This engenders confidence on the country as it plays its roles as a member of the international community.

- Other public sector uses (Estacodes) – which allow the government to conduct its business overseas.

Figure 3
Trends in Nigeria's External Debt (1990 - 2012)



	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Gross External Reserves	4.15	1.55	1.43	9.01	1.61	3.4	7.22	7.11	5.42	9.39	10.27	7.68	7.47	16.96	28.28	42.3	51.33	53	42.38	32.34	32.64	43.85
External Debt	33.37	27.56	28.72	29.43	32.58	28.06	27.09	28.77	28.04	28.27	28.35	30.99	32.92	35.94	20.48	3.54	3.65	3.72	3.95	4.22	5.67	6.3

Period

Through the use of external reserves, the government sector has been able to carry out its activities both locally and internationally without much hindrance.

4.2.3 Real Sector

The real sector encompasses activities relating to the aggregate supply and demand in an economy. Activities in this sector cover national output, consumption, savings, and capital formation. The real sector utilizes external reserves for:

- Infrastructure Development - Freed reserves from debt forgiveness were utilized for the development of infrastructure such as roads and schools in the Niger Delta region, as well as electricity and railway services. This is expected to impact positively on the real sector by making it cheaper to conduct business in Nigeria, and to the larger economy through higher growth and development.

- Importation of Raw Materials and Intermediate Goods - External reserves are also used for the importation of raw materials and intermediate goods in order to enhance the productivity of the local industries. However, the absence of critical infrastructure has exacerbated the utilization of external reserves for importation of mainly consumer goods. This has negatively affected local industries, leading to unemployment and loss of income.

Despite the injection of large amount of resources into the development of local infrastructure and importation of raw materials and intermediate inputs, the reduction in the costs of doing business and the growth of the local industries are yet to manifest.

4.2.4 External Sector

The external sector of the economy refers to the rest of the world; so external sector activities are international transactions that all residents of the country (private and public sectors) conduct with the rest of the world. These transactions are conducted with the use of external reserves. As such, the external sector benefits from efficient external reserves management through:

- Absorption of external shock by serving as a buffer especially during the global financial crisis. This was clearly demonstrated during the 2008 global financial crisis. As a result of the financial and economic shocks around the world, many foreign investors liquidated their local investments in order to cover up their losses elsewhere. Nigeria's external reserves were extensively used to support the Naira, which led to its depletion from about US$62.0 billion at end-September, 2008 to US$32.35 billion at end-December, 2010.

5.0 Challenges in External Reserves Management and Utilization

In spite of the achievements recorded in external reserves management in Nigeria, some challenges have remained daunting, especially after the 2008 global financial and economic crisis. These challenges include:

Low returns on investments: External assets have continued to attract low yields, especially during the post-2008 crisis. This is due to historic low policy rates and massive injection of liquidity by central banks around the world, which is aimed at boosting economic growth.

Increased Uncertainties in the Market: The global economy is currently faced with uncertainties due mainly to the Eurozone fiscal and financial crises, the United States debt challenges and their effects on the global economic growth. As a result, reserve managers are finding it increasingly difficult to find safe assets with reasonable returns that will ensure the safety of their assets.
Policies and Guidelines: Given the nature of central banks as conservative investors since the assets are publicly owned, there are a lot of restrictions in the investment policies and guidelines concerning the type of securities, currencies and markets that they can invest in. Currently, there are a number of markets and asset classes that the CBN is not allowed to invest in, while eligible assets tend to bring very low returns. The rapid growth in reserves has put a lot of pressure on central banks and sovereign wealth funds (SWFs) to change their asset allocation to include more non-traditional asset classes.

Investing in Emerging Market: The attention of asset managers is now turning to emerging market economies in order to enhance returns on investments. This, however, comes with its own challenges such as regulatory systems and trained banking and stock market regulators.

6.0 Conclusion and Policy Recommendations

Reserve management process in Nigeria has undergone tremendous improvement over the years – from a purely manual to a semi-automated process. This has benefited the system through improved efficiency, increased returns and capacity of personnel. In addition, it has also impacted positively on the four main sectors of the Nigerian economy by engendering confidence in the country and its monetary policy. However, this effect is somewhat limited due to the inadequate linkage between the various sectors of the economy, and the challenges in administration of public funds.

Based on the challenges identified, the following policy recommendations are made to ensure that asset managers meet their objectives of safety, liquidity and returns.

- Amendment of the CBN Investment Guidelines by widening the investment horizon which would allow investment in different asset classes with each asset manager having its own benchmark;
- Removal of the restriction of investment to the OECD and other developed economies so that asset managers can diversify investments into emerging markets that have strong credit ratings; and

The use of other investment vehicles such as the recently launched National Sovereign Investment Authority (NSIA) as is the practice in other resource rich countries. This will enable asset managers to invest locally in infrastructure so as to boost economic growth.

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