

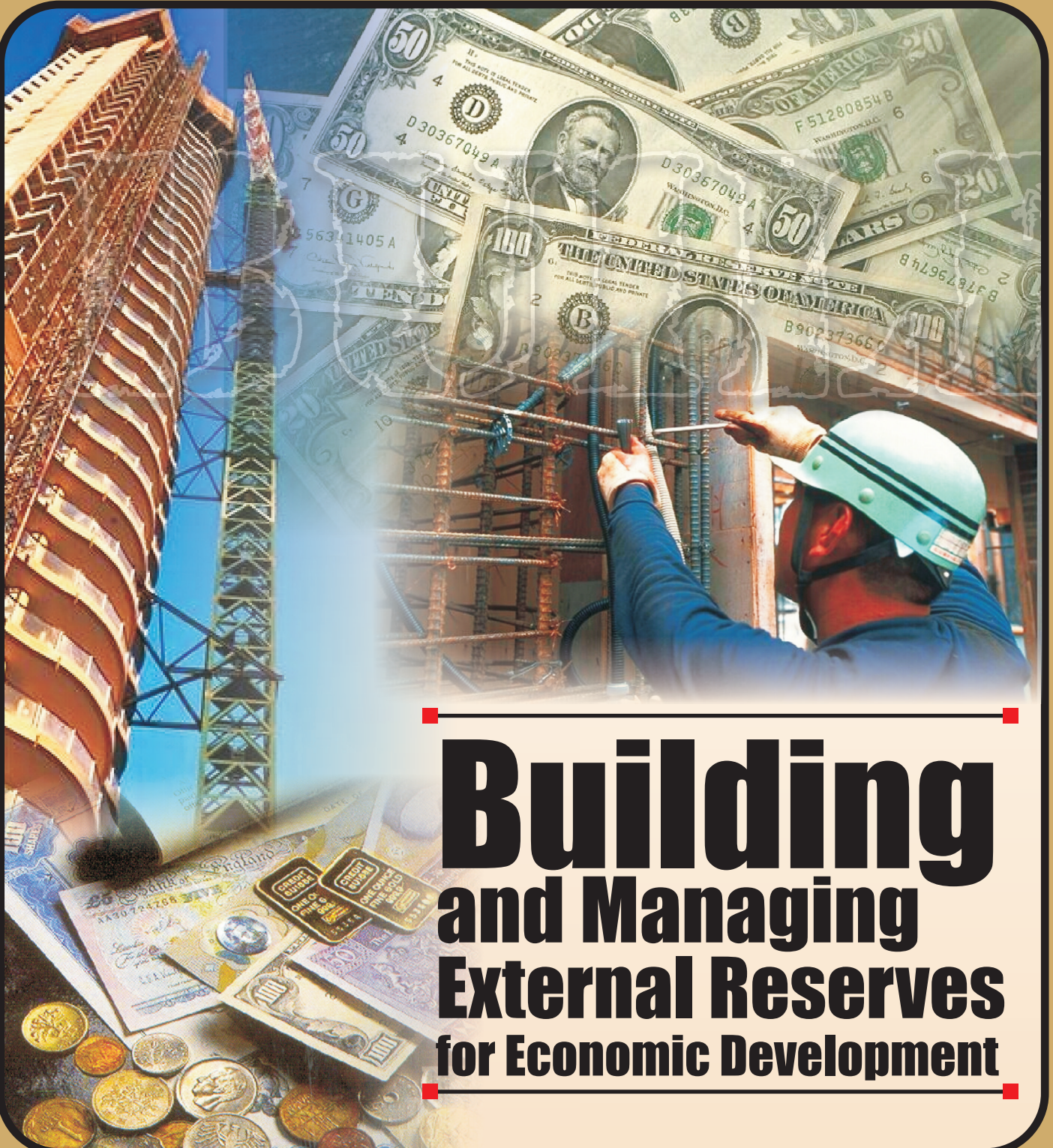


BULLION

PUBLICATION OF THE CENTRAL BANK OF NIGERIA

Volume 31 No. 2

April - June 2007



Building and Managing External Reserves for Economic Development

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BULLION ISSN - 0331 - 7919

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OVERVIEW OF EXTERNAL RESERVES MANAGEMENT IN NIGERIA



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INTRODUCTION

External reserves or foreign exchange reserve has become one of those common economic terms that we all seem to understand and can describe with ease. This is because we have all come to realise the importance of the volume of external reserve to our ability to import needed industrial capital goods and processed manufactured products, as well as the movement in the naira exchange rate. The Central Bank of Nigeria (CBN) has further popularised the word through the media in recent time via monthly or even weekly announcement that the external reserve has hit \$30 billion, \$40 billion, etc. Whatever the motive, the common man may not perceive fully its importance but to an economist, it is part of confidence building for local and foreign investors. The recent stability of the naira exchange rate is dependent on the growing foreign reserve. This could be why the federal government continues to, justifiably, showcase the volume of the reserve as one of its achievements, besides clearing the hitherto huge external debts. But do we really understand the complexity of external reserve as we do with our daily bread? A journey through this paper will give us the answer. Suffice to state that

this paper expectedly starts with the common definitions and explanation of external reserve in order to provide a level playing ground for the task ahead.

The Longman Dictionary of English Language attempted, among other definitions, to define reserve as "money or its equivalent kept in hand or set aside usually to meet liabilities" and specifically for external reserves, "the liquid resources (assets readily converted into cash) of a nation for meeting international payments". The Oxford dictionary of Economics, produced by John Black, explains that foreign exchange reserves refer to "liquid assets held by a country's government or central bank for the purpose of intervening in the foreign exchange market". These two definitions seem to differ on the purpose of holding foreign exchange reserves though the former is more all embracing with the phrase "for meeting international payments" than the latter's "for purpose of intervening in the foreign exchange market". "Meeting international payments" includes intervening in the foreign exchange market. But the use of external reserve can be captured thus: "the external reserves of a country are the financial assets available to the government to meet temporary imbalance in the external payments; to intervene in its foreign exchange market in defence of its exchange rate; and, to settle obligations arising from international trade, financing contracts, diplomatic relations, etc." (Rasheed, 1995). To meet up with these obligations will require huge external reserves and this

applies to all countries, whether developed or developing.

Typically, external reserve is like the same as in a home. When you consume less than you produce or earn, you build up a reserve. Albeit, it becomes complicated when the reserve you have may not be the same value when you want to cash. In this context, you try to earn some returns on your reserve by putting it in an income generating account. A country tries to do the same.

Given the above foundation, we move into specifics in the succeeding sections. The rest of this paper is divided into four sections. In section 2, we discuss the composition of external reserves while in Section 3 an attempt is made to review management of external reserves in some selected countries and the Nigerian case is discussed in Section 4. Summary and conclusions are contents of the last Section.

2. COMPOSITION OF EXTERNAL RESERVES

A number of items constitute the external reserves of a country. These include mainly gold, foreign currencies (notes and coins), special drawing rights (SDRs) and the Reserve Tranche at the International Monetary Fund (IMF). It could also include balances payable on demand held with financial institutions abroad, bills of exchange and promissory notes denominated in foreign currencies, treasury bills issued by foreign governments, and, marketable securities issued or guaranteed by foreign government or international

financial institutions. Let us look at the main items in economic terms.

i. Gold, a precious metal, though widely used for jewellery and other ornamental purposes, is also used as a form of money. Gold coinage was at a time in general circulation but it is now confined to holdings of gold bullion by central banks as part of their foreign exchange reserve. Although still widely performs the store of value function for individuals who mistrust fiat money which is vulnerable to fluctuation in value as a result of inflation, its use as a foreign reserve dates back to the period referred to as "gold standard". The gold standard is a system of fixing exchange rates by the central bank or government of each country in such a way that the currency is freely convertible into gold at a fixed price. In this case, the per value of exchange rates is set by the amount of each currency that can be obtained for a given quantity of gold. This is referred to as gold parity i.e. the official per value in terms of gold of the currency of a country on the gold standard. We also have what is called 'gold point' which means the values of exchange rates under the gold standard at which it becomes profitable to ship gold from one country to another. For instance, if the euro rose relatively to the pound sterling, a firm or agent holding sterling with euro payment to make could buy gold from the Bank of England, ship it to Germany and sell it to central bank there. Today, gold is used within the context of external reserve as a store of value by countries and this is because its value is relatively stable in the international market that foreign currencies.

ii. Foreign Currencies

otherwise tagged reserve currency or anchor currency refers to currencies other than the

domestic currency of the country concerned. It is a currency held in significant quantities by many countries and institutions as part of their foreign exchange reserve. The currency must of course be convertible in the international market held by the central bank or government. To be suitable for use as reserve, the currency needs to belong to a large country with a reputation for low inflation and relative stability in the international market. Naturally a country is concerned with currencies of her trading partner or the currency which the trading partners prefer for transactions. In the 18th and 19th century, the pound sterling of the United Kingdom served as the major reserve currency but the United States dollar had since taken over. Today, the US dollar is major transaction currency all over the world though other key currencies like the euro, pound sterling and Japanese yen do serve as reserve currencies. According to the IMF, mid-2006 data show that 65.4% of the identified official foreign exchange reserves in the world were held in the United States dollars, 25.4% in euros, 4.2% in pound sterling, and 3.3% in Japanese yen. The US dollar is therefore said to have "reserve currency status", making it possible for the United States to run significant trade deficits (financed by seigniorage) with limited economic impact.

iii. Special Drawing Rights (SDRs) is a form of international money created by the IMF and defined as a weighted average of various convertible currencies. Actually, the IMF official unit of accounts are kept in SDRs and member countries are credited with SDR holdings which can be used to settle balance of payments deficits between them, subject to rules governing the

average amount to be held over any five-year period.

iv. Reserve Tranche

corresponds to the part of each IMF member country's originally deposited in gold or convertible currency. Each IMF member has a quota. The size of the quota varied according to the importance of the country. A country's quota has three important aspects. First, it specifies how much the country must subscribe to the Fund. Second, the quota defines a country's drawing rights, i.e. how much a country can borrow from the Fund. Third, it indicates the country's voting power. The most important aspect of the arrangement is the Drawing Right. Each country's drawing right is divided into five parts. The first is called the gold tranche, because it corresponds to the country's subscription in gold. The next four are called the first, second, third and fourth credit tranche. Under the IMF practice, a country can automatically make use of its gold tranche. Also, the first quarter of the quota of any member of IMF is available to it unconditionally if required but the conditions of approval become more and more stringent as a country applies to go beyond its first credit tranche.

External reserve, which is the official public sector foreign assets and which are readily available to and controlled by a designated government agency, usually the central bank, constitute an important arm of the country's financial dealings. The type of assets held, where they are held and in what form give an indication of the principles followed by the country's foreign exchange management. A set of objectives is put in place in the management of external

reserves. These objectives include:

- Support and maintenance of confidence in the policies for monetary and exchange rate management, including the capacity to intervene in support of the national currency;
- Limiting the external vulnerability by maintaining foreign currency liquidity to absorb shocks during times of crisis or when access to borrowing is curtailed;
- Provide a level of confidence to the international market that a country can meet its external obligations; and
- Maintain a reserve for national disasters or emergencies.

It is imperative to note that:

- large proportion of the assets must be held in liquid form and should be readily available for settling the country's international transactions;
- foreign exchange in excess of immediate requirement for transaction should be invested in interest-bearing securities which are marketable and likely to appreciate in value but can be liquidated without much capital loss; and,
- the assets must be held with reputable and credible financial institutions for safety purposes (Thliza, 2006).
- It is important at this stage to review management of external reserves in some developed and developing countries. This is the import of the next section.

3. REVIEW OF MANAGEMENT OF EXTERNAL RESERVES IN DEVELOPED AND DEVELOPING COUNTRIES

In this section, we review management of external reserves in five countries namely United Kingdom, Canada, Botswana, Brazil and India.

i. **United Kingdom:** Her Majesty's Treasury (HMT) owns the official holdings of external reserves in this country. The reserves consists of gold, foreign currency assets, IMF Special Drawing Rights (SDRs) and the U.K's Reserve Tranche Position (RTP). With the exception of RTP, the reserves are held in the Exchange Equalisation Account (EEA). The Bank of England manages the reserves as agent for HMT, as well as providing advice on reserves management issues, including liability management. Criteria for managing the reserves are set out by HMT in an annual Remit, the main text of which is published in the Debt and Reserve Management Report normally produced by the HMT at the time of budget. The EEA was established as a fund for stabilising the exchange rate value of the pound sterling, thus any exchange rate intervention would be conducted through the EEA. However, the Bank of England manages its own holdings of foreign currency assets and gold, and it can intervene in support of its monetary policy objective using own resources rather than those of the EEA. The Bank of England Act 1998 sets out rules governing the disclosure of any such intervention.

The Remit summarises (i) the benchmarks that the reserves are actively managed against; (ii) the investment constraints within which the Bank operates; (iii) the framework for risk control; and (iv) the arrangements for the audit of the EEA. The Bank also sets a profit target, net of management

costs, for active management against the benchmark. The Bank of England manages HMT's foreign exchange assets and liabilities jointly on a day-to-day basis.

Under the Exchange Equalisation Act, funds in the EEA may be invested in any assets denominated in the currency of any country; in the purchase of gold; or in the acquisition of SDRs. The statutory obligation of the EEA dictates that investments must be highly liquid, so they may be made available quickly for intervention purposes if necessary. They must also carry acceptable credit risk. Essentially, this means that the bulk of the assets are securities issued by the national governments of the United States, euro area countries and Japan. Other instruments include bonds issued by highly rated supranational organisations, foreign currency spot, forward and swap transactions, interest rate and currency swaps, forward rate agreement, gold deposit, certificate of deposit and bank and corporate commercial papers.

ii. **Canada:** In Canada, foreign reserves are owned by the government and managed by both the Bank of Canada and the Department of Finance. The objectives of reserve management are:

- to provide general foreign-currency liquidity for the government; and
- to provide funds to help promote orderly conditions in the Canadian dollar in the foreign exchange market.

Over the past 25 years, the management of reserves in Canada has changed dramatically reflecting developments in financial markets. The

government has increased the level of foreign reserves in recent years to reflect increased flows in foreign exchange markets and to bring its level of reserves more in line with other comparable sovereigns. This has necessitated the need for the reserve managers to focus on asset-liability and risk management as well as on reducing the cost-of-carry of these reserves while maintaining a high degree of liquidity and capital safety. The liquidity reserves are sub-divided into two in order to meet the objectives, viz: (i) a proportion of the reserve is held in highly liquid U.S. dollar denominated assets to fund immediate foreign currency liquidity requirements and intervention activity; (ii) the remainder is held in a diversified portfolio of high-quality assets, denominated in U.S. dollars, euros, and yen.

The liquid reserves are held in a special account called the Exchange Fund Account (EFA) under the Minister of Finance's name at the Bank of Canada. The EFA is financed with foreign currency-denominated liabilities issued by the Government of Canada. Canada's reserve assets are governed by the Currency Act, which serves as the legal framework for EFA asset management and investment operations. Legally the Minister of Finance approves policies for managing EFA mainly through a set of investment guidelines. The Financial Administration Act governs the liabilities that fund the EFA.

Liquid reserves and gold are actively managed by the Bank unlike the SDRs and the reserve position at the IMF. As of December 31, 2001, Canada held about US\$34 billion in total international reserves and about US\$30 billion or 89 percent of

these was held in liquid assets consisting of marketable securities and deposits denominated in dollars, euros and yen. The responsibilities for the day-to-day portfolio management and strategy implementation of the EFA rest with the staff of the Foreign Reserve Management Team at the Bank. The Risk Management Unit (RMU) at the Bank oversees and manages the risks associated with the EFA. The RMU manages EFA risk in three steps viz:

- identifies, analyses, evaluates and models the risk;
 - advises on guidelines to limit the risks; and
 - ensures day-to-day adherence to the guidelines, while periodically proposing new risk control mechanism.
- It is important to note however, that the government uses external securities lending managers to manage a securities lending programme for a portion of its U.S. Dollar-denominated securities. Formal agreements are signed between Canada and the external managers and they must follow the policies and guidelines provided by the government. The external managers are required to submit reports, on monthly basis and upon request, describing details of the loans and investments.

iii. Botswana:

The Bank of Botswana Act, 1996, outlines the primary functions of the Bank, which include, *inter alia*, the management of the foreign exchange reserves. Thus the major responsibilities of the Bank of Botswana include the management of foreign exchange reserves on behalf of the government. A major feature of the reserves management practice is

to divide the reserves into sub-portfolios namely, the Pula Fund (long term) and the Liquidity Portfolio (short-term). The Bank's policies for management of the foreign exchange reserves can be summarised in order of importance thus: safety, liquidity, and return.

With respect to long-term portfolio, the Pula fund, return takes priority over liquidity while safety continues to have the highest priority for both the Liquidity Portfolio and the Pula Fund. The appropriate level for the liquidity portfolio is determined such that the portfolio acts as a buffer against short-term trade and capital account fluctuations, and as a cushion to finance unforeseen developments in the external payments situation. The liquidity portfolio is further sub-divided into two tranches: the Transaction Balances Tranche (TBT) and the Liquidity Investment Tranche (LIT). The TBT functions as a current account to take care of inflows and outflows. The rest of the reserves are invested in the long-term Pula Fund.

One of the objectives of establishing the Pula Fund is to take advantage of the high level of the reserves and invest part of them in assets such as long-term bonds and equities, with the expectation of earning a higher return than could be achieved on conventionally managed foreign exchange reserves, thereby developing a long-term earner of foreign exchange for the country.

Relative to many other central banks in Southern Africa, the Bank of Botswana has for many years had a high level of external reserves, approximately 39 months of import cover as at 31st December, 2001. In Botswana, one of the key features of reserve management is the contribution that the income earned from the reserves makes to government

funding. Thus, income from external reserves has been the third most important constituent of budgetary revenues. The external reserves have not been used as a mechanism for supporting the exchange rate in the context of the Bank's monetary policy objectives. Actually, the Bank does not intervene in the foreign exchange market.

Within the enabling legislation, apart from the Bank as an entity, other members in the reserve management process are the Board, Investment Committee, Financial Markets Department and external fund managers. The Board is composed of members from the public and private sectors as well as academia. The Board is responsible for governance and ultimately the investment results; it enunciates the mission, goals and policies, as well as designs the structure with appropriate accountability. The Investment Committee is responsible for strategic decisions against the benchmarks as well as the rebalancing of portfolios while the Financial Market Department is responsible for the implementation of the decisions of the Investment Committee. It is also responsible for monitoring external fund managers and other external relationships.

A cardinal feature of the Bank of Botswana reserve management operations is the use of external fund managers since 1981. External management of reserves provides an alternative or a fallback position in the absence of specific relevant skills in the Bank and in the case of a possible brain drain of the Bank's scarce manpower resources.

Brazil: The objectives of external reserve management in Brazil are subordinated to Banco Central do Brazil's monetary and foreign

exchange policies. Like other cases treated above, Brazil has a floating exchange rate regime and the main objectives of maintaining external reserves are to:

- Support monetary policy.
- Control excessive volatility of the foreign exchange market.
- Guarantee payment of foreign exchange debt.

Banco Central do Brazil (BCB) is the sole authority empowered by the country's Constitution to manage the foreign exchange reserves and following the above stated objectives it is expected to ensure safety, liquidity and profitability of and from the reserve. The Bank has a Board of Governors which is responsible for the reserves strategic allocation and defining the investment policies. The Board has established a detailed benchmark and guidelines and opted for an active management of the reserves.

The BCB investment policy for foreign exchange reserves is based on three pillars namely, reference portfolio, investment guidelines, and performance measurement. The reference portfolio, as approved by the Board, is divided into three tranches gold, emerging markets reserve and core reserve. The last represents the large majority of the reserves as the position in gold and emerging market debt is less than 3 percent of total reserves. This tranche (reference portfolio) is denominated in three base currencies: U.S. dollars, euro, and Japanese yen and is divided between money market (40%) and fixed income (60) portfolio.

The gold portfolio is divided into two portfolios with one located in Brazil and the other invested in short-term gold deposits in the

international market. The emerging markets portfolio is managed using the "EMBI Brazil+" index as a reference. In this case, the BCB is restricted to investing in Brazilian sovereign external debt bonds. The money market portfolio has four tranches. A small working capital tranche is fully invested in U.S. dollar overnight deposits and is for the purpose of controlling excessive volatility and providing liquidity for a sustainable domestic foreign exchange regime eventually. The other three portfolios are for the benchmark currencies U.S. dollar, euro and Japanese yen.

Six external asset managers manage a small part of the reserves, about three percent. They are given the same benchmark as the domestic fixed income portfolio manages and similar guidelines. The main purpose of this programme is technical know-how transfer.

India: The Indian approach to determining adequacy of foreign exchange reserves has evolved over the past few years based on a number of commissioned and non-commissioned reports. India's foreign exchange reserves consists of three main components Gold, Special Drawing Rights (SDRs) and Foreign Currency Assets (FCAs). In quantitative terms, the level of foreign reserves in India has steadily increased from US\$5.8 billion at end-March 1991 to \$54.1 billion in end-March 2002 and to \$62.1 billion in September of the same year with FCAs accounting for \$58.8 billion and gold was \$3.2 billion.

The broad objectives of reserve management in India are:

- maintaining confidence in monetary and exchange rate policies;
- enhancing capacity to

intervene in foreign exchange markets;

- limiting external vulnerability by maintaining foreign currency liquidity to absorb shocks during times of crisis;

- providing confidence to the markets, especially credit rating agencies, to the effect that external obligations can always be met, thus reducing the overall costs to the economy or the market participants; and

- adding to the comfort of the market participant, by demonstrating the backing of domestic currency by external assets.

The Reserve Bank of India (RBI) Act of 1934 contains the enabling legal framework for the Bank to act as the custodian of foreign exchange reserves, and manage the reserves within the defined objectives. The law broadly permits the following investment categories: (i) Deposits with other central banks and the bank for International Settlements (BIS); (ii) deposits with foreign commercial banks; (iii) debt instruments representing sovereign/sovereign-guaranteed liabilities (with residual maturity not exceeding 10 years); and (iv) other instruments as approved by the Central Board of Directors of the central bank.

The decisions on currency composition and asset allocations are taken by the Reserve Bank in consultation with Government of India. There is a Strategic Committee headed by the Governor/Deputy Governor in charge of foreign exchange reserve management which takes major decisions relating to currency investment. The Department of External Investments and Operations is given some flexibility with regards to currency composition to take

advantage of market trends.

It is noteworthy that a small portion of the Indian external reserves has been assigned to external asset managers with the objectives of gaining access to and deriving benefits from their market research. It also helps to take advantage of the technology available with the asset managers while utilising the relationship to obtain the required training/exposure for the central bank's personnel dealing with foreign exchange management. The external managers are given clear investment guidelines and benchmarks and their performance is evaluated at periodic intervals by a separate unit with the Bank's office structure.

The above review assists in providing us with information on management of external reserves in other countries and could serve as a basis for comparison or agreement/disagreement on what our Central Banking is doing with respect to management of our external reserves. This is more important with respect to accumulation of huge reserves which is the CBN's current policy.

4. MANAGEMENT OF EXTERNAL RESERVE: OVERVIEW OF THE NIGERIAN CASE

1. The Background

Crude oil accounts for more than 90 percent of Nigeria's exports, 25 percent of Gross Domestic Product (GDP) and 80 percent of the public revenue. Thus, a small oil price increase can have a large positive impact on revenue, vice versa. This implies that the country's heavy reliance on oil production for income generation has great implication for economic policy management, particularly when we know that exports and

government revenues are uncertain and highly volatile. The external shocks arising from such uncertainty has brought difficulties and high costs to the Nigerian economy in recent past. Such costs include fiscal and monetary disequilibria, inflation, exchange rate fluctuation, lower private investment and private capital flight. This is more so because we take every oil windfall as permanent phenomenon rather than temporary event and engage in large and persistent budget deficit. Oil price falls, on the other hand, are taken as temporary, resulting in refusal to curtail expenditure when such happens. External reserve in such situations is seen as money to be spent immediately to meet the growing demand for domestic and imported goods and services.

Economic theory argues that a transitory rise in money and credit, arising from transitory rise in exports, will by itself, lead to (i) transitory rise in nominal income and the quantity of money; and (ii) a transitory rise in imports and a lasting reduction in reserves equal to the amount of credit enlargement (Polak and Boissonneult, 1959).

Since the CBN gained its autonomy in the new millennium, it has developed a Vision and Mission. The vision is "to be one of the most efficient and effective among the world's central banks in promoting and sustaining economic development". Arising from the vision, the Bank engaged in restructuring/reengineering code named EAGLES which translates to:

- E = Efficiency
- A = Accountability
- G = Goal oriented
- L = Leadership
- E = Effectiveness

S = Staff oriented.

The mission of the Bank arising from this vision is captured as follows' "To be proactive in providing a stable framework for the economic development of Nigeria through transparent implementation of monetary policy and achievement of efficient and effective price stability for a sound management of the financial system". The reengineering exercise is intended to radically alter the way things were being done. It is in this context that the operations in the external sector had to radically change as currently observed.

ii. Reserve Management Objectives and Institutional Framework

The broad objective of management of external reserve by the Central bank of Nigeria (CBN) can be gleaned from the Act that set up the apex institutions. Among other functions in the CBN Act of 1958 and the last amendment of 1999, the CBN is directed to "maintain external reserves to safeguard the international value of the legal tender currency". From the review of literature in the preceding Section, we can deduce that external reserves are required principally to:

- meet temporary imbalances in the external payments required to be met by a country;
- intervene in the foreign exchange market in order to stabilise the exchange rate;
- settle financial obligations arising from international trade; and
- financing of foreign contractual agreements and other important regional or multilateral grouping levies and dues.

The management of Nigeria's external reserves has two main

objectives namely, financing the government's current expenditure, and funding the capital account (Rasheed, 1995). The funding of current expenditure includes foreign debt service, diplomatic and military expenditure, as well as, funding of the Foreign Exchange Market (FEM) which is aimed at financing private sector expenditure in respect of importation of capital and intermediate goods and services. Funding of the capital account consists of investments to hedge government's foreign liabilities, with the aim of providing income and capital streams from which future interest and capital payments of loans can be made. A third objective being introduced by the current Central Bank Governor Prof. Charles Soludo is building confidence in the international business community.

The rationale for holding external reserve by the Central Bank of Nigeria can be summarised as follows:

- To provide liquidity that is easily spent or exchanged in settlement for transactions with the rest of the world. This is imperative given the high propensity to import goods (capital, intermediate and finished) to meet domestic needs.
- To fund the foreign exchange market with a view to having stable exchange rate, necessary to build up confidence in the domestic currency.
- To enhance international credit worthiness. A respectable level of reserve serves as a notice to the international community that a country's economic prospects are good.
- To use the available stock as buffer against external shocks. A high level of external reserves

allows a country to adjust gradually to external shocks when they occur suddenly, e.g. sudden fall in prices of oil as in the case of Nigeria. (Rasheed, 1995).

■ The Central Bank of Nigeria is vested with management of the countries external reserves. The legislative powers allow the Bank to buy, sell, and otherwise deal in foreign exchange, among other things, to achieve the monetary policy objectives. The responsibilities are not shared with other government agencies, reflecting the role of reserves as a source of intervention capital.

iii. Organisational and Decision making Structure

Although the power for the management of the country's external reserves is vested in the Governor of the Central Bank, a broad Committee of Governors (CoG) comprising of the Governor, four Deputy Governors and a Secretary provide the guidelines for the management and sought the approval of the Board of Directors of the Bank. The Board of Director itself consist of the CoG and six directors. The implementation of the operations of the management of the external reserves resides with the Department in charge of foreign operations while the CoG oversees it.

In administering the reserves, whether in-house or through third-party managers, there are three major frameworks of governance: (a) Oversight Function/Committee, (b) Investment Policy Committee, and (c) on-going Portfolio Management Team. The Oversight Committee within the Bank would determine or approve the asset mix and composition based on Central Bank's guidelines, while the Investment Committee is expected to select specific benchmarks by which to measure and monitor

portfolio performance. It is the responsibility of the Management Committee to actively manage the funds by distributing the assets into specific investment instruments based on credit quality, maturity and risk tolerance.

Iv. Asset Allocation and Risk Management

According to the latest reports from the Central Bank in March 2007, the Nigeria's external reserve has grown over US\$45 billion and towards the US\$50 billion target by the CBN Governor. The reserve management strategy of the CBN is anchored on liquidity management and capital preservation. In this case, the Bank holds the larger proportion of its reserves in secure, liquid though low yield assets such as foreign government bond and time deposits with reputable international financial institutions. The principal instrument of choice for sovereign external reserve is United States debt securities. These include treasury bonds, and bills and notes of varied maturity. The treasuries are backed by the full faith and credit of the US government and therefore command a high rating and remain relatively liquid. The New York money and bond markets are by far the biggest and most liquid investment centres. The securities from these sources are considered very safe and stable. It is estimated that buyers from Asia, notably Chinese, Japanese and Korean government account for over 30% of the US treasury purchases.

Apart from the above and the IMF tranche, Gold is another major reserve given its relative stability and inherent store of value. International convertible currency also feature prominently in Nigeria's reserve portfolio, as well as investments grade bonds

issued by sovereign entities like international financial institutions and supranationals viz IMF, World Bank, International Finance Corporation (IFC), African Development Bank (ADB), European Bank, etc. Just like most countries in the world, including those reviewed above, the US dollar remains the base currency of choice for the Nigeria's foreign reserves. This is in order to meet the bulk of our international trade and loan obligations which are denominated in the US dollars. Albeit, the currency investments are diversified into US dollars, euro and Japanese yen.

As part of the risk management of the reserve, the Central Bank established a benchmark for the assessment of performance of its investment. Benchmarks could be customised based on investment philosophy, underlying instrument or market indices. Modern portfolio theory espouses that in investing, reward is inextricably linked to risk. For instance, long term financial instruments have higher returns in the long run but less liquid and risky while short-term instruments are highly liquid, risky and low returns.

The benchmark establishes a risk-return measurement for actively managed portfolio. It provides a yardstick for measuring the success or failure of any specific asset class and also acts as the instrument for efficient long-term risk management. With the benchmark, it is now possible for both internal and external managers to build efficient portfolio and actively monitor market risks rather than relying on instinct and rule of thumb.

v. External Management of External Reserves

The Central Bank of Nigeria has always engage the services of external managers based on some

criteria. Morgan Guaranty Trust Company, New York has been a major manager of the country's external reserve. However, reserve management of the CBN has taken dramatic turn recently, particularly the external management. The present stance of the Bank is that the external managers would have to manage the reserves along with local banks. Thus, the local banks could no longer be bystanders but active participants in the management of the external reserve.

The Bank gave some criteria to both the external and internal managers. Any external manager of the country's reserve must have a local counterpart and must have minimum credit rating of AA by the international financial indices. The aims of the Central Bank in this regard are to allow the local banks to develop professionalism in reserve management i.e. human capacity building, propel them into indispensable global players in assets management, and create opportunities for Nigerians to be acquainted with dealings and trends in international environment. The Governor of the CBN promised that local financial institutions that are able to muster a billion dollars in capital would be given opportunity to manage at least US\$500 million of the external reserves.

In the first phase of selection of external reserves managers, 14 assets managers were appointed with their local partners. These include, Black Rock and Union Bank of Nigeria Plc., J.P. Morgan and Chase Zenith Bank Plc., H.S.B.C. and First Bank of Nigeria Plc., BNP Paribas and Intercontinental Bank Plc., UBS and United Bank for Africa Plc., Credit Suisse and IBTC Chartered Bank Plc., Morgan Stanley and Guaranty Trust Bank., Fortis and

Bank PHB Plc., Investec and Fidelity Bank Plc., ABN Amro and Access Bank Plc., Cominvest and Oceanic Bank Plc, ING and Ecobank Plc., Bank of New York and Stanbic Bank Plc., and, Crown Agents and Diamond Bank Plc. It is noted that each of the selected external managers, according to the CBN information, has assets under management in excess of US\$50 billion. How much of the external reserves will be managed by the external managers is still a subject of speculations.

Vi. Transparency and Accountability

All transactions regarding the management of external reserves are carried out with utmost transparency as the books are available to the Board for inspection and regular reports are forward to the Presidency and Ministry of Finance. The CBN is

expected to review performances of the external/internal managers, at least quarterly, through their reports and opening up of their books. In addition, request from the National Assembly on management of the reserves and other information are promptly granted, aside from the general information to the public on the growth and decline of the external reserves.

5. S U M M A R Y A N D C O N C L U S I O N

This paper attempts to present an overview of the management of the Nigerian external reserves. In doing this, we highlighted the major instruments of reserve management and presented case studies of five countries, comprising of two developed and three developing countries. Finally, we presented the Nigerian case within the context of background of the economy, reserve

management objectives and institutional framework, organisation and decision making structure, asset allocation and risk management, and external management of the country's external reserves.

It is instructive to note that the management of external reserves by the Central Bank is not different from how it is done elsewhere. The growing of the external reserves also conforms with the current happenings in other part of the world. This is more so for a country that is currently import dependent and heavy reliance on one commodity for foreign exchange. The stance that the current oil boom should be treated as a temporary occurrence is ideal not only because that is what it is but because of the past experience that landed us into huge debt and economic stagnation. International prices are rising and so the payments, in foreign currency, that

will be required to meet international transactions are growing.

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THE MONETIZATION OF NIGERIA'S FOREIGN EXCHANGE INFLOWS



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INTRODUCTION

External reserves are the foreign currency deposits held by the central banks and monetary authorities, these are assets of the central banks which are held in different reserve currencies such as the US Dollar, Euro, Sterling, Yen, etc, and which are used to back its liabilities, e.g. the local currency issued.

The IMF Balance of Payments Manual defined external reserves as "those external assets that are readily available to and controlled by monetary authorities for direct financing of payments imbalances, for directly regulating the magnitude of such imbalances through intervention in exchange markets to affect the currency exchange rate, and/or for other purposes".

Historically, external reserves predate currency. It was held only in gold as official gold reserves and when the dollar was pegged to gold, the US Government made the dollar a reserve currency.

Wikipedia states that the purpose of holding reserves is to allow central banks an additional means to stabilize the issued currencies from excessive volatility and protect the monetary system from

shocks. In addition to meeting the transaction needs of countries, reserves are used as a precautionary purpose to provide a cushion to absorb unexpected shocks or a sharp deterioration in their terms of trade or to meet unexpected capital outflows, e.g. the negotiated exit payment of the Paris Club Debt by Nigeria. Reserves are also used to manage the exchange rate through intervention in the foreign exchange market and control of money supply through buying and selling of foreign exchange; improvement of a country's credit worthiness; and wealth accumulation through prudent management. Thus the motives for holding adequate level of external reserves can therefore be summarized into transaction, precautionary and speculative.

Nigeria's external reserves are held in foreign convertible currencies which are not legal tender currencies in the country. Consequently, for such reserves to make any impact in the Nigerian economy, they have to be converted into the local currency and be integrated into the money supply through a process called monetization.

Against this background, the paper is structured into five sections. Section 1 introduces the topic while section 2 discusses sources of foreign reserves. In section 3, monetization in relation to the mandates of the CBN is discussed, while section 4 discusses the ownership components of Nigeria's external reserves. Section 5 takes a critical look at the beneficiaries and how monetized

funds are utilized. Section 6 examines the impact of monetization on the economy while section 7 concludes the paper.

2. SOURCES OF NIGERIA'S FOREIGN RESERVES INFLOWS

Nigeria's major foreign reserves inflows are derived from the following oil sources:

I. Sale of Nigeria's Crude Oil Equity

The Nigerian National Petroleum Corporation (NNPC) has the responsibility for the sale of Nigeria's crude oil. Receipts from such sales are warehoused into our foreign accounts and constitute part of external reserves.

ii. Royalties

These are funds paid by oil companies to the nation arising from the commercial exploitation of Nigeria's oil resources. The Petroleum Act of 1969 provides a percentage to be paid as royalty on the chargeable value of the crude oil/ petroleum spirit production in a particular period.

iii. Petroleum Profits Tax (PPT)

This is the tax paid by oil companies on profits arising from their operations. A tax rate of 85% effective 1st April 1975 was specified by the Petroleum Profits Tax Act

iv. Penalty for Gas Flaring, Rentals, Signature Bonuses

Foreign exchange is realized from penalties for gas flaring, rental payments from Oil Prospecting License (OPL), conversion to oil

mining lease, oil exploration license, and concession block allocation. Also Signature bonus (an amount payable at the signing of an agreement for the award of OPL as part of the validity process of oil contract agreement) is a source of foreign exchange.

v. Receipt from Gas Sales

Other sources of foreign exchange inflows include:

vi. Withholding Tax, Value Added Tax, Company Income Tax, Education Tax, and Rent/interests received from investments abroad, Personal Home remittances.

vii. Export proceeds from non oil sources agricultural produce, processed and semi- processed products, etc.

viii. Grants and other miscellaneous receipts.

In Nigeria, over 85 per cent of foreign exchange reserves is realized from the oil sector.

3.0 MONETIZATION AND THE MANDATES OF THE CBN

The core mandates of the CBN which are derived from the provisions of the CBN Act of 1991 as amended include the following:

- issuance of legal tender currency notes and coins;
- maintenance of Nigeria's external reserves to safeguard the international value of the legal tender currency;
- promotion and maintenance of monetary stability and a sound and efficient financial system in Nigeria; and
- Acting as banker and financial adviser to the Federal Government.

Under the provisions of the aforementioned Act, the CBN is empowered to print/mint issue and re-issue currency notes and coins, purchase and sell foreign currencies, sell, discount and rediscount bills of exchange and treasury bills, etc.

“Monetization” according to Wikipedia, the free encyclopedia, “is the process of converting or establishing something into legal tender. It usually refers to the printing of banknotes by central banks, but things such as gold, silver and diamonds can also be monetized. Monetization may also refer to exchanging securities for currency, selling a possession, charging for something that used to be free or making money on goods and services that were previously unprofitable”.

Arising from the above definition, it is noteworthy that every component of external reserves can be monetized. However, for purposes of this paper, monetization can be defined as the process whereby monetary authorities, acting on the instruction of a customer, convert foreign currency into its local currency (Naira) equivalent using appropriate exchange rate and the proceeds credited to an account designated by the authorizing party.

3.1 Why Monetization?

Monetization of foreign currencies is carried out by CBN in exercise of the powers conferred on the Bank by the provisions of the CBN Act 1991 as amended. It entails the creation of money by monetary authorities and consequent release of such money into the financial system.

The 1999 Constitution of the Federal Republic of Nigeria Section 162(1) makes provision for the creation of an account called “the Federation Account”. All revenues collected by the Government of the Federation, except the proceeds from the personal income tax of the armed forces of the Federation, the Nigerian Police, the Ministry or Department of government charged with responsibility for

Foreign Affairs and the residents of the Federal Capital Territory, Abuja shall be paid into the Federation Account. Section 162(3) of the same Constitution provides that “any amount standing to the credit of the Federation Account shall be distributed among the Federal and State Governments and the Local Government Councils in each state on such terms and in such a manner as may be prescribed by the National Assembly”. Against this backdrop, all revenues received both in foreign and local currencies on behalf of governments are to be credited to the Federation Account.

A large chunk of the revenues earned on behalf of the governments is received in foreign currencies. These funds consist of receipts from various revenue sources such as PPT/ Royalties, Crude oil sales, Withholding tax, Company income tax, etc. Hence, in order to give effect to the provisions of the Constitution stated above, the foreign currencies need to be monetized into the legal tender currency (Naira) and credited into the Federation Account for onward distribution to the three tiers of governments.

3.2 Monetization Procedure

In accordance with best practices, banks are required to display their exchange rates on daily basis. Such display specifies the buying and selling rates of the various international convertible currencies. As part of its functions, the CBN applies the exchange rates obtained at the bi-weekly Wholesale Dutch Auction System (WDAS) on transactions between the CBN and its customers.

The CBN maintains offshore accounts to receive foreign exchange inflows from the various sources mentioned above. As soon as advices from correspondent banks confirming

programme included: Single digit inflation rate; Gross reserves to cover at least three months of imports; Central bank financing of budget deficit to be limited to 10 percent of previous year's tax revenue; and Budget deficit/gross domestic product ratio not to exceed 4 percent.

In addition to the above primary criteria, other sets of requirements in the form of secondary criteria include: Prohibition of new domestic arrears and liquidation of all exiting arrears; Tax revenue /GDP ratio to be equal to or more than 20 percent; Wage bill/total tax revenue to be equal to or less than 35 percent; Public investment/tax revenue ratio to equal to or more than 20 percent; Real exchange rate stability to be maintained by each country; and Maintenance of positive real interest rates.

3.0 Financial Integration in the West African Monetary Zone
This segment examines different aspects of financial integration in the West African Monetary Zone (WAMZ) in order to complement the literature on macroeconomic integration. Historically, the emphasis has been on the objective of macroeconomic integration in the monetary union thereby resulting in the establishment of macroeconomic convergence criteria. In contrast, less attention has been paid so far to the process of financial integration in spite of its potential benefits to the Union.

Financial integration can be defined as a process, driven by market forces. During the process separate national markets gradually enter into competition with each other and eventually become one financial market, characterized by converging prices, product supply, and converging

efficiency/profitability among the financial services providers (European Union, 2005). There are several channels that can further financial integration, namely cross-border ownership, and establishment or service provision. Integration may also emerge because of formal efforts to integrate financial markets in a regional integration agreement. Integration in this sense may involve eliminating restrictions to cross-border financial operations by firms from countries in the same regional arrangement, as well as harmonizing rules, taxes, and regulations between the member countries (Galindo et al. (2002)).

There are three widely accepted interrelated benefits of financial integration: more opportunities for risk sharing and diversification; better allocation of capital among investment opportunities; and potential for higher growth. Moreover, in the context of a monetary union, financial integration facilitates the conduct of monetary policy. Overall, it is generally recognized that the benefits of a well-sequenced financial integration process are likely to outweigh the implied costs (Baele et al. (2004)).

Financial depth in the WAMZ is low but comparable to the average for sub-Saharan Africa (SSA). At 22.8 percent, the ratio of M2 to GDP is close to the sub-Saharan median of 23.4 percent. Similarly, the ratio of net credit to the economy of 19.7 percent of GDP exceeds the comparable ratio of the SSA average of 16.7 percent. As of end-2005, banking assets were about 34.6 percent of GDP in the WAMZ. In contrast, this ratio reaches 77 percent in the European Union. Reflecting their share in the regional economy, banks in Nigeria and Ghana dominate the WAMZ's banking sector. These two

countries account for about 85.0 percent of GDP and about the same share of regional banking assets. In contrast, the smaller economies of The Gambia, Ghana and Guinea together account for less than 15.0 percent of zone's bank assets in the WAMZ. The average loan-to-deposit ratio at about 67.7 percent in the WAMZ in 2005 was higher than the sub-Saharan at about 52.3 percent (WAMI, 2005).

There is scope for increased intermediation in all countries. Domestic credit-to-GDP is in the range of 1520 percent for all countries thus financial intermediation in the WAMZ seems below its potential. Bank credit mostly at short-term maturities goes to a few large corporations operating in a limited number of sectors. The structure of the zonal economy is characterized by a small number of large borrowers as the corporate sector is not well developed and all countries are still dependent on a few commodities. As a result, risk concentration coupled with sensitivity to terms of trade shocks remain key sources of vulnerability. Access to and cost of finance remains major obstacles for small and medium-sized enterprises (SMEs). Barriers to finance for SMEs include the unavailability or unreliability of financial statements and uncertainties and delays in judicial procedures for recovering claims and realizing collateral.

Given the low level of intermediation through banks, there is need to put in place at the zonal level the necessary legal framework for the development of the non-bank financial sector. In addition to microfinance institutions, a number of nonbank financial institutions such as leasing companies and venture capital firms have emerged. The WAMZ zone has also seen an

such credits into the accounts are received, the funds are booked by the CBN in local currencies, i.e. the Naira equivalents of the funds are created in the Bank's books using the prevailing exchange rates on the respective value dates. At this point, the funds (Naira values) become sterilized and arrangement would be made by the CBN to have local currency in its vault (through the process of money creation) to match the quantum of booked funds. If an instruction is received from the customer/owner of the fund (Government, banks, etc) to credit its account with the proceeds, the booked funds would be transferred to the customer's account by the CBN. The foreign exchange inflow is thus said to be monetized and the proceeds (Naira) become available for spending. It is only at this instance that money supply is increased by the volume of the Naira transferred.

3.3 Types of Monetization

Foreign exchange receipts from the various sources outlined above are usually set aside as per the various reserves components.

Inflows from both the government and private sectors are monetized upon receipt of mandate. For private sector funds, the process of monetization is usually automatic. This is because a confirmation of receipt of the foreign exchange inflow into CBN's offshore account by way of a SWIFT (Society for World wide Inter-bank Financial Telecommunications) message is a necessary and sufficient condition for the CBN to monetize the fund and credit the beneficiary's account through his local banker, as long as adequate information is contained in the message. However, for inflows received on behalf of governments, monetization is

predicated on receipt of mandates from the ultimate beneficiary which is seen as a necessary condition.

Monetization of government funds by the CBN can be of two types statutory and occasional.

Statutory monetization is carried out monthly during which foreign exchange receipts from the sale of crude oil, PPT, Taxes and Royalties are transferred by the agencies to the CBN for monetization in preparation for the Monthly Federation Accounts Allocation Committee (FAAC) where the funds are distributed to the various tiers of government. In like manner, receipts of Value Added Tax (VAT) in foreign currencies are also monetized monthly and distributed in accordance with prescribed allocation formula. Education Tax in foreign currencies is equally monetized and credited to the Education Tax Fund for use on the purpose for which the Fund was set up.

Occasional monetization takes place whenever governments or any of its agencies decide to use its foreign currency receipts or part of it to meet domestic obligations. Agencies like National Maritime Authority, Nigerian Ports Authority fall into this category. There are also times when governments may decide to monetize and share part of funds accruing to them in the Excess Crude Accounts to meet budget deficits as the case may be.

4. OWNERSHIP STRUCTURE OF NIGERIA'S EXTERNAL RESERVES

Nigeria's external reserves can be broken down into three distinct components, depending on the ownership, as follows: CBN Reserves; Federation Reserves; and FGN Reserves.

i. CBN Reserves

This comprises all foreign exchange inflows that have been monetized by the CBN and released to the beneficiaries for their use. Hence, once the foreign exchange inflow has been monetized and the Naira equivalent released to the customer by the CBN, the foreign exchange no longer belongs to the customer but to the CBN. In that respect, a greater portion of Nigeria's external reserves, having been monetized, belongs to the CBN and is called **CBN reserves**. This component of external reserves can only be available to an applicant (customer) where its equivalent amount in local currency is provided by the customer. For instance, an applicant who needs to import goods or pay for international services in foreign currency would provide the Naira cover to the CBN to enable the release of the foreign exchange.

i. Federation Reserves

This represents the portion of external reserves that has not been monetized by the CBN. The Naira values of such reserves are sterilized in various customer liability accounts and can only be released into the financial system upon receipt of mandates from the beneficiaries. Earnings called "Excess Crude Oil proceeds" which is the difference between the budgeted benchmark price and the actual market price belong to this component. They also include the differences between budgeted benchmark for PPT/ Royalties and the actual PPT/Royalties realized. As the name implies, these reserves belong to the three tiers of Governments, namely: the Federal, States and Local governments.

ii. The Federal Government reserves

This component of external reserves belongs solely to the

Federal Government. It comprises foreign exchange realized from the sale of Federal Government properties, or proceeds from the privatization of Federal Government Companies, returns from Federal Government investments abroad, etc. These funds can be monetized any time a mandate is received from the Federal Government.

As at 28th February, 2007 out of total reserves of USD42.55 billion, USD31.71 billion belonged to the CBN while the balance of USD10.84 billion belonged to the Federation and the Federal Government. This means that the Naira equivalent of USD31.71 billion has been spent and only USD10.84 billion is available for monetization.

The table in Appendix 1 shows the volume of external reserves in respect of Crude oil, PPT/Royalties monetized and credited into the Federation Account for distribution between 2002 and 2006 as well as the Excess Crude proceeds monetized within the same period.

5. BENEFICIARIES AND UTILISATION OF MONETIZED FUNDS

5.1 Beneficiaries

Beneficiaries of monetized funds include:

i. Federal, State and Local Governments - Regular monthly monetization of foreign exchange inflows into the Federation Account are distributed to the three tiers of government in accordance with the provisions of the Nigerian Constitution.

ii. Government Agencies Requests for monetization are occasionally received from agencies such as Nigerian ports Authority, National Maritime

Authority, etc.

lii. Private Individuals Remittances in favour of individuals are received and monetized to the benefit of such individuals through their local banks.

iv. Corporate entities (companies, banks, corporations, etc) Remittances in the form of unutilized DAS funds, export proceeds and repatriated interest are received on behalf of companies, corporate entities, etc in accordance with foreign exchange regulations. These are monetized and credited to the accounts of such entities through their local banks.

5.2 Utilization of Monetized Funds

Monetized foreign exchange reserves are utilized by the beneficiaries for various purposes, namely:

a) As revenues for the Implementation of Governments' Budgets

The three tiers of government (Federal, States and Local) rely on the monetized foreign exchange receipts distributed at the monthly FAAC meetings to implement their budgets. Without monetized funds, it would be extremely difficult for any government of the Federation to implement its budget. This is because monetized revenues from foreign exchange earnings constitute a major proportion of funds distributed at the meetings.

b) To Finance Budget Deficits

At times, when governments (Federal, state, and local) find it difficult to finance their budgets as a result of shortfalls in revenue expectations, a decision could be taken to monetize and share part of reserves set aside for the rainy day, e.g. Excess Crude reserves. This has been done on many

occasions to bail governments out of cash flow problems.

c) To Finance Domestic Projects

Personal home remittances from Nigerian nationals abroad are monetized and used to finance domestic projects which are denominated in local currency.

d) For Consumption purposes

Monetized funds can also be used to finance domestic consumption expenditures, e.g. procurement of furniture, food, clothing, etc.

e) To Finance Internationally Sponsored Projects.

Monetized foreign exchange inflows from international donor agencies, such as the European Union, World Bank, United Nations, etc are used to finance projects in Nigeria which are sponsored by these donor agencies.

6. IMPACT OF MONETIZATION ON THE NIGERIAN ECONOMY

One of the core mandates of the CBN is to maintain and promote monetary stability and a sound and efficient financial system in Nigeria.

In furtherance of this objective, the Bank evolves monetary policy which it implements in order to achieve the desired policy objectives. Measures are designed to regulate the value, availability and cost of money in an economy, in consonance with the expected level of economic activity. Hence, the Bank must attempt to keep the growth of money supply at an appropriate rate to ensure sustainable growth and maintain internal and external stability. The aim is to ensure that the Bank does not deviate significantly from its money supply, interest rate, inflation and exchange rate targets.

Monetization entails the release of

liquid funds into the financial system. The funds so released would increase the level of money supply and therefore impact positively on the level of economic activities as more funds would become available for investment in productive activities. Employment would be generated, output will increase, consumption would be boosted and all these would have their multiplier effects. If the increased financial resources are efficiently employed, the standard of living of the people would improve.

If however, foreign exchange inflows are not monetized, they would not be available for spending in Nigeria since such currencies are not legal tender in Nigeria. There would be very little to distribute to governments at the monthly FAAC meetings since funds generated locally would be grossly inadequate. Government budgets would become difficult to implement and economic activities could be grounded. This becomes apparent as the country runs on a mono product economy, relying heavily on funds from the oil sector.

7. CONCLUSION

From the foregoing, monetization of foreign exchange inflows can be seen as a very important

function performed by a central bank in exercise of its mandate as an issuer of legal tender currency notes and coins.

The process of monetization is very crucial for countries whose currencies are not convertible. For such countries, earnings from exports are received in foreign currencies which are not legal tender in those countries. Hence, such receipts can only be integrated into the financial system if they are monetized into the local currency.

The various governments in Nigeria largely depend on foreign exchange earnings, mostly from oil and oil related sources to implement their budgets. As a result, it becomes imperative that the process of monetization be carried out regularly to provide the needed funds. This is reinforced by the provisions of the Nigerian Constitution which makes it mandatory for all receipts on behalf of governments to be credited to an account called the "Federation Account" and distributed at the end of every month to the three tiers of governments.

Nigeria's external reserves are owned by: The Central Bank; the Federation and the Federal

Government. Once foreign exchange is monetized and its local currency value is released to the beneficiary, it no longer belongs to the customer but the central bank. The bulk of our external reserves belong to the CBN and that bulk has already been monetized. It is therefore a misconception to argue that the country's reserves should be used to better the condition of living of the populace even when the reserves have been monetized and distributed!

In respect of monetary policy, the monthly monetization of oil and other foreign exchange inflows have been built into the various government budgets and are not likely to distort the monetary policy targets set by the monetary authorities. However, monetary policy implementation is greatly affected by unplanned monetization that takes place from time to time particularly Excess Crude monetization involving the release of huge sums into the financial system. In such cases, the CBN often finds itself spending a lot of money to mop up the excess liquidity. Monetization of such excess crude oil receipts should be carried out when it is extremely necessary, especially if the funds are to be utilized for projects with

wealth creating capacity.

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SOURCES, CURRENCY COMPOSITION AND USES OF EXTERNAL RESERVES



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INTRODUCTION

External reserves otherwise referred to as foreign exchange reserves are the stock of foreign exchange acquired from international transactions and available to the monetary authorities. They are held in gold, reserve position in the International Monetary Fund (IMF), foreign government securities and convertible currencies in bank balances abroad. In other words, they are stocks of savings from foreign exchange transactions between the residents of an economy and the rest of the World during a given period of time that are held and controlled by the monetary authorities. The net of the receipts and expenditure of foreign exchange through the official sector adds to the stock of reserves or depletes the stock depending on whether a net inflow or net outflow has occurred. When foreign exchange receipts exceed outpayments, an accretion to reserves is recorded. On the other hand, when a net outflow occurs, external reserves are drawn down. Foreign exchange held by the non-official sector constitutes part of a nation's external assets. External

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reserves are portions of external assets under the control of the Central Monetary Authority.

There is usually a distinction between foreign exchange reserves and foreign exchange assets. The former is as defined or conceptualized already while the latter refers to all the foreign assets of the country, including those outside the control of the central bank.

External reserves are managed to ensure that they are adequate for meeting a range of defined national objectives including the settlement of external obligations as scheduled and defense of the external value of the domestic currency to ensure that it is correctly valued and that the external sector does not lose competitiveness.

External reserves are also managed to control risks and thus ensure the security of reserves and guarantee reasonable earnings from their placement. Depending on the general goals of macroeconomic management and the specific objectives of monetary policy, reserves management may be guided by certain preferences.

The management of external reserves is critical to a Central Bank since the movement in the quantum of reserves, the deployment of the reserves and the allocation of the net accretion to reserves between sterilisation and monetisation impact on monetary aggregates and the ability of a Central Bank to conduct monetary policy efficiently. Central banks are therefore interested in the management of external

reserves, not only to ensure that monetary policy is not compromised but also to ensure that the external value of the domestic currency is protected through intervention in the foreign exchange market. External reserves also permit central banks to limit the vulnerability of the country to external shocks, give confidence to the public and reassure credit rating agencies and international financial institutions about the soundness of the economy as the needs arises.

The intention of this presentation is to spell out the basis for external reserves accumulation as well as their management in order to achieve a number of national aspirations. Thus the rest of the paper is structured into five parts. The sources and uses of external reserves are presented in part 2 while part 3 is focused on the adequacy of external reserves. In part 4 currency compositions of external reserves is discussed, while the paper ends in part 5 with conclusions.

2.0 SOURCES AND USES OF EXTERNAL RESERVES

2.1 Sources of External Reserves

External reserves are the stock of convertible currencies under the control of the monetary authorities. They are earned from net export of goods and services as well as home remittances of nationals living abroad and migrant workers remittances. The foreign investment by foreigners in the home country is also a source of external reserves accumulation. Other forms of capital inflows as

well as drawdown of external loans and grants are additional sources of external reserves. The net of international transactions, inflows and outflows of foreign exchange also adds to the stock of external reserves when the former exceeds the latter. The reserve position of a country in the International Monetary Fund also counts as part of the foreign assets. Increases in the allocation of Special Drawing Rights (SDR) add to a country's external reserves.

External reserves are invested in foreign government securities, foreign bank balances in deposit money banks or in other central banks as well as in foreign currency assets. External reserves are also deployed into other assets that are not so liquid such as the reserve position in the fund, SDR and Gold.

2.2 Uses of External Reserves

The uses of external reserves are discussed under the context that the motives for holding and accumulating reserves are also modes for the use and deployment of the reserves. The motives are the transactions, precautionary (intervention) and wealth preservation/ diversification motive.

I. Settlement of International Obligations and Transactions

External obligations have to be settled in foreign exchange. Therefore, the stock of reserves becomes important as a source of financing external imbalances, even when current foreign exchange receipts are low and inadequate to meet current commitments. Payments for imports, remittances to international organizations and foreign missions abroad as well as debt service payments are effected in external reserves which have to be earned and managed to preserve their value. When the transactions motive is preponderant, a large percentage

of the reserves would be kept in liquid form in foreign currencies or in secured assets. The reserves would also not be invested in long-term foreign assets; thus, the yield would be relatively low.

II. Foreign Exchange Market Intervention

Although the argument has been advanced that the exchange rate system in place could indicate the need for reserves, contemporary developments have shown that reserves are required in all situations. The argument was advanced that in a fixed exchange rate system, reserves should be adequate to defend the arbitrarily determined exchange rate which in most cases would be overvalued. As in a floating exchange rate system, the need for reserves is said not to be too important as the demand and supply schedules in the foreign exchange market would determine the appropriate exchange rate. However, reserves would be deployed when the market clearing exchange rate overshoots the level that is consistent with the achievement of the goals of macroeconomic policy.

III. Guiding Against Unforeseen Volatility

The precautionary motive suggests that reserves be held by the monetary authorities to cushion external shocks that may not be discernible or that may not have been envisaged. With such reserves, the impact of external shocks is moderated while remedial measures are put in place to stabilise the foreign exchange market and strengthen the external sector through export incentives geared towards making the export sector competitive. A sudden drop in the earnings from a major export commodity will precipitate a balance of payments problem if it persists. Immediately, government budget will be affected, the foreign exchange

market will be short of supply, and the exchange rate will become overvalued if not adjusted to forestall such occurrence. There is need to maintain adequate reserves that can be deployed when export receipts drop.

IV. Maintaining National Wealth for Future Generations

The wealth motive indicates that reserves are held as a store of future value. In this regard, two reinforcing objectives are satisfied; the capital value of savings is maintained while resources that are not required for immediate use are more efficiently utilized. The perception of the future level of inflation and impact on various currencies would influence the level of reserves and the currency composition. The need to ensure that the capital value of reserves is maintained and that income is earned is influenced by the opportunity cost of holding reserves; traditionally measured by the marginal product of capital but more recently by the marginal cost of borrowing in the international capital market. The reserves so maintained would be for the benefit of future generations as reserves are national assets which should not be fully consumed in the current period.

V. Taking Advantage of High Returns on Risky Investments

Part of the reserves of a country can be used for investments on assets with high risks and returns. This is usually advisable when the reserves are substantial and the portfolio of assets is well diversified. In recent times central banks have become more active in reserves management, as opposed to the traditional passive and conservative posture that stresses the need for safety. International banks and investment houses are partnering with banks in Nigeria to manage portions of the country's foreign

reserves. These investment outfits venture into areas outside the traditional conservative investments and in the process earn high returns. There are however safeguards to ensure that they do not undertake investments that are too risky.

4.0 CURRENCY COMPOSITION OF EXTERNAL RESERVES

The approaches to determining the optimal currency composition of foreign reserves are the mean-variance portfolio approach, the transactions-based approach and the intervention-oriented approach. The latter approach considers the timing of reserve use in arriving at the optimum currency composition. These approaches may be applied in isolation in which case one may predominate at any point in time. Also, they could be combined and weighted depending on the objective of foreign reserves management. We shall however concentrate on the issues in currency composition of reserves, rather than the optimal composition of reserves.

Basically the motives for holding reserves as well as the uses of the reserves will ultimately influence the composition of the reserves, whether in terms of liquidity or currency composition. Currency composition of external reserves in practical terms is affected by a number of considerations which include: the correlation of the currencies in the foreign exchange markets, the relative stability of the reference currency and the size of the reference currency or international currencies in the external trade of the home country. A country will want to maximize returns from foreign reserves by holding the reserves in foreign currencies that are stable in value as well as in a combination of currencies that are not highly correlated so as to avoid losses from contagion. For fragile economies with relatively low reserves and that are also subject to exchange rate volatility, the

transactions and intervention motives will, predominate reserve management. In that case, reserves will be kept in safe investments as safety and liquidity will be emphasized. The currency denomination of such investments will also be done in such a manner that currencies that fluctuate widely in value will be avoided. The placements of investments in currencies as well as foreign government securities are also influenced by the relative strengths of such currencies and the reference currencies of the securities.

Apart from investments to earn income through appropriate portfolio mix of assets, the desire to earn arbitrage interest from overnight movement of external reserves across various national borders and among various currencies also affects the currency composition of reserves. Movement in interest rate and exchange rate developments induce substitution of currencies in the international foreign exchange markets and gains as well as losses are made. In the process, the currency composition of reserves is affected. It should however be stated that the currency composition of reserves is a deliberate policy action.

The finance of international trade and other external payments require that reserves be deployed in such a way that the commitments are met as agreed with the external customers. Where a country is import dependent, it may be necessary for reserves to be largely kept in the currencies of the country's major trading partners. It therefore means that if a country's imports are mainly from a particular region of the world, the currency composition of reserves should reflect that reality. Thus the currencies of that region should constitute the bulk of the reserves. This will make it easier for imports to be paid for without undertaking

cross currency conversion which could result in exchange losses. It is also better for a country to maintain most of its reserves in the currency of a country in which most of its international obligations, such as imports payments and other external payments including debt servicing are denominated. The use of a third currency will result in cross conversions with attendant losses. Where the currency of a major trading partner is unstable and the yield in the money market is not attractive most of the reserves may not be kept in the currency of that country as unmitigated losses could be incurred. It will be more appropriate to diversify the reserves away from that currency, especially if the cross conversion of currencies in the process of redeeming external obligations in that currency is not adverse and is better than not altering the reserve composition.

As external reserves holdings increase above the threshold considered adequate, the need for safety and liquidity should be balanced with that of income. This is why countries transit from passive to active reserve management, with some portions of the reserves deployed to investments with more returns but higher risks. The currency composition will then be influenced by an additional factor relating to the risk- return preference. The external reserves of the country have been largely placed in the US dollar. The holdings in the US dollar totaled 93 per cent in 2000. These increased to 95 per cent in 2001, dropped to 85.8 per cent in 2004 and rose to 92.9 per cent in 2005. A reduced level of 87.6 per cent was recorded in 2006.

A review of foreign reserves management in Nigeria showed that the nation's reserves have been managed over the years by correspondent banks abroad as well as reputable international

investment companies with instructions from the Foreign Operations Department of the Central Bank of Nigeria. Most of the reserves are in liquid assets, foreign currencies and foreign government securities, while a small proportion representing gold, SDR, etc are non-liquid assets. Although most of Nigeria's reserves are still invested in liquid assets, the CBN has commenced investment of part of the reserves with the agency of some Nigerian banks partnering with foreign banks/ fund managers. This is expected to diversify the investment portfolio and ultimately enhance returns.

5.0 CONCLUSION

Apart from the exchange rate mechanism, other factors influence the design of a framework for external reserves management. These are the state of the money market and the state of the balance of payments. Countries with unstable money markets and volatility in foreign exchange receipts from exports would normally hold large stock of external reserves to be deployed when the balance of payments position deteriorates. Beside the general macroeconomic objectives for holding external reserves, other reasons have been advanced as motives for

holding external reserves. The main motives have been identified as transactions, precautionary and wealth. Although, the motives appear identical to those for holding money domestically, there are some important distinctions. Whatever the motive for holding foreign exchange reserves, the authorities ultimately want to earn income from placement of the reserves. Thus, the proportion of reserves that may be left for risky investments would be relatively low. Above all, external reserves act as buffer to cushion shocks arising from exchange rate volatility as well as instability in

foreign exchange earnings.

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RISK MANAGEMENT IN THE INVESTMENT OF EXTERNAL RESERVES



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INTRODUCTION

External reserves could be defined in several ways as there is no universal definition of reserves. However, the definition based on the classification outlined by the IMF in its Balance of Payment Manual is widely accepted. The 5th Edition of the IMF Balance of Payments Manual, defines international reserves as "those official public sector foreign assets of a nation that are readily available to and controlled by the monetary authorities, for direct financing of payment imbalances, and directly regulating the magnitude of such imbalances, through intervention in the foreign exchange markets in order to affect the currency exchange rate and/or for other purposes".

Based on this definition, any parts of the external reserves of a country or nation that is attached or tied to any legal dispute or financial obligation do not qualify as foreign reserves. Also the foreign currency and security holdings of the banks, government agencies, companies and the general public

are not normally included as part of foreign or external reserves of a country.

External reserves are variously called International reserves, Foreign Reserves or Foreign Exchange reserves. Therefore any of these could be used interchangeably in this paper. These external reserves are normally managed or invested to meet specific objectives of any country or nation. In Nigeria, the CBN Act No. 24 of 1999 (as amended) vests the custody and management of the country's foreign reserves in the CBN therefore the CBN manages/invests these foreign reserves to meet the objectives of safely (capital preservation), liquidity and returns subject to risk constraints. These investments are usually in money and capital markets instruments.

The phenomenal leap in the level of Nigeria's external reserves, especially since the beginning of 2004 (see table 1) has made the Bank to initiate a more active ways of managing the reserve. This therefore calls for adequate risk management framework to guide against avoidable losses.

The main objective of this paper therefore is to discuss various risks inherent in the investment of external reserves and how these risks are being managed to mitigate against avoidable losses. To address the main focus of this paper therefore, it is structured into seven sections. Following this introduction, section II discusses the concept of risk, categories and types of risk; section III discusses Risk Management framework; while

section IV discusses Investment Policy and Guidelines. Section V discusses monitoring, control and compliance; section VI contains the Challenges to Risk management while section VII concludes the paper.

II) RISK CONCEPT AND TYPES OF RISK

What is Risk?

Risk is a concept that denotes a potential negative impact to an asset or some characteristic of value that may arise from some present process or future events. Many definitions of risk depend on specific application and situational contexts. Frequently, risk is considered as an indicator of threat. It can be assessed qualitatively or quantitatively. Qualitatively, risk is considered proportional to the expected losses which can be caused by an event and to the probability of this event. The harsher the loss and the more likely the event, the greater the overall risk. Measuring risk is often difficult; the probability is assessed by the frequency of the past similar events. An engineering definition of risk is given as:

$\text{Risk} = (\text{Probability of an accident}) \times (\text{losses per accident})$

In Finance, risk is the probability than an investment's actual return will be different from expected. This includes the possibility of losing some or all of the original investment. It is usually measured by the standard deviation of the historical returns or average returns of a specific investment.

Categories of Risk

Risk can be categorized as **Diversifiable** and **Non-Diversifiable**. Diversifiable risk is the risk that can be eliminated by diversification. It is the unique risk that is caused by factors that are specific to individual assets. It is also referred to as unsystematic risk. Non-diversifiable risk is the risk that cannot be eliminated by diversification. It is also referred to as systematic risk or market risk. It is the variability in all risky assets resulting from macroeconomic variables. It changes over time with changes in the macroeconomic variables.

Types of Risk:

There are many types of risks. Some of them are as discussed below:

Liquidity Risk:

This is the risk that cash cannot be realized in a timely and economic fashion in order to meet any and all forecast and unpredicted cash flows. Liquidity risk arises from situations in which a party interested in trading an asset cannot do it because nobody in the market wants to trade that asset. Liquidity risk becomes particularly important to parties who are about to hold or currently hold an asset since it affects their ability to trade.

Credit Risk:

This is the risk of losses to a debtor's non-payment or default on a loan or other line of credit (either the principal or interest (coupon) or both). Credit risk could be faced by both corporate bodies and individuals. Corporate bodies carry credit risk when, for example, they do not demand up-front cash payment for products or services. By delivering the product or service first and billing the customer later, the company is carrying a credit risk between the delivery and payment. Individuals may also face credit risk in a direct form as depositor at banks or as investors

or lenders. They may also face credit risk when entering into standard commercial transactions by providing a deposit to their counterparties.

Investment wise, there are two types of credit risk. The first is the potential market value loss, that is incurred when the portfolio is invested in credit products and the yield spread to governments widens, i.e. credit instruments underperform versus higher quality assets held in the benchmark portfolio.

The second type of credit risk is the risk of default of an obligor. Unlike the first type, which is a continuous process, default risk is an event risk where the outcome is unpredictable and cannot be dynamically managed. Default risk is a function both of the underlying credit worthiness of the obligor and the period of time before repayment of the obligation.

Market risk:

This is the risk that the market value of an investment will decrease because of adverse movements in market factors. These factors are as stated below:

- Equity risk factor the risk that stock prices will change
- Interest rates factor the risk that interest rates will change
- Currency risk factor the risk that foreign exchange rates will change
- Commodity risk factor the risk that commodity prices will change.

Reinvestment risk:

This is the risk that a particular investment might be cancelled or stopped somehow, that one may have to find a new place to invest that money with the risk being that there might not be a similarly attractive investment available. This primarily occurs if bonds (which are portions of loans to

entities) are paid back earlier than expected. This normally happens in an interest rate decreasing environment. This can also be likened to prepayment risk.

Interest Rate Risk:

This is the risk that the relative value of a security, especially bond, will worsen due to an interest rate increase. This is because there is an inverse relation between the price of bonds and interest rate. This risk is commonly measured by the bond's duration, which is the percentage change in the price of a bond as a result of a percentage change interest rate.

Operational Risk:

This is the risk of unexpected losses due to either failure of internal control, system failure, lack of backups or disaster recovery plans. The Basel Committee defines operational risk as "the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events". However, the Basel Committee recognizes that operational risk is a term that has a variety of meanings and therefore, for internal purposes, banks are permitted to adopt their own definitions of operational risk, provided the minimum elements in the Committee's definition are included.

Country/Political Risk:

This is the risk that country of investment may go into political crises thereby threatening ones investment.

Other Types of Risk:

These include:

Reputation Risk - The risk that one cannot be trusted

Foreign Exchange Risk - The risk that arises from the change in price of one currency against another.

Settlement Risk - The risk that a counterparty does not deliver a security or its value in cash as per agreement when the security was traded after the other counterparty or counterparties have already delivered security or cash value as per the trade agreement.

Legal and Regulatory Risk - The risk that a government may change the law in a way that adversely affects an investor's position.

III) RISK MANAGEMENT FRAMEWORK

The management of external reserves entails exposure to significant risks. These risks must be identified, understood and controlled in order to ensure that the objectives of safety, liquidity and return are achieved. The process of identifying and controlling these risks is referred to as risk management and the responsibilities of ensuring that the framework for risk management functions properly are vested on Risks Analysis & Control Office in Reserve Management Division of Foreign Operations Department.

Steps in the Risk Management Process

The Risk Management process involves the following:

a) Define and Identify the Risk

Risks are about events that, when triggered, can cause problems. Hence, risk identification can start with the source of problems or with the problem itself. Risks sources may be internal or external to the system that is the target of risk management. When either source or problem is known, the events that a source may trigger or the events that can lead to a problem can be investigated. Common risk identification methods are: Objectives-based risk identification, Scenario-based risk identification, Common-risk checking and Risk charting.

b) Measure or Quantify the Risk

Once risks have been identified, they must then be assessed as to their potential severity of losses and to the probability of occurrence. These quantities can be either simple to measure or impossible to know for sure in the case of the probability of an unlikely event occurring.

c) Manage the Risk

Once risks have been identified and assessed, all methods to manage the risk fall into one or more of the following four major categories:

■ Risk Avoidance

This includes not performing an activity that could carry risk. Avoidance may seem the answer to all risks, but avoiding risks also means losing out on the potential gain that accepting the risk may have allowed.

■ Risk Retention

This involves accepting the loss when it occurs. This is a viable strategy for small risks where the cost of managing the risk would be greater over time than the total losses sustained. All risks that are not avoided or transferred are retained by default.

■ Risk Reduction

This method involves reducing the severity of the loss. This involves actions taken to mitigate against heavy loss if any.

■ Risk Transfer

This means causing another party to accept the risk, typically by contract or by hedging. Generally, taking offsetting positions in derivatives is typically how firms use hedging to financially manage risk.

d) Make Provision for Losses

Here, decision is made on the combination of methods to be used for each risk. A risk budget is

prepared.

Each risk management decision should be recorded and approved by the appropriate level of management. The Central Bank of Nigeria uses a mixture of risk reduction and risk transfer as set out in the Investment Policy and Guidelines of the Bank.

IV) INVESTMENT POLICY AND GUIDELINES

The Investment Policy sets out the institutional framework necessary for the transparent and efficient realization of the foreign exchange reserve management objectives of the Central Bank of Nigeria. These objectives are:

- Capital Preservation
- Liquidity
- Maximize returns consistent with benchmark risk.

The Investment Policy, which is approved by the Board of the Bank, is the investment authority authorizing the investment of reserves within broad limits or risk parameters. In addition to setting out the reserve management objectives, it defines the key risks that must be controlled in order to achieve these objectives.

The Investment Policy is supplemented by the Investment Guidelines.

These guidelines specify the benchmark against which the CBN measure the performance of the portfolio. They also specify the eligible instruments in which the external reserves may be invested. These eligible instruments are those permitted by the CBN Act. In addition, the guidelines stipulate certain risk limits, which must not be breached.

Extract of Investment Guidelines

Eligible Currencies and Currency Limits

Base currency for the CBN portfolio is the US dollar.

Exposures outside the US dollar are limited to the Euro, the British Pound, the Japanese Yen and the Swiss Franc. Forward currency hedging between approved currencies is permitted for a maximum term of one year provided that the amount of currency sold does not exceed the value of the underlying securities held in that currency.

Eligible Investment

Securities issued by the US Treasury or guaranteed by the US government; securities that are obligations of the central governments of any Organization for Economic Cooperation and Development (OECD) country, denominated in eligible currencies; Negotiable certificate of deposits; Bankers Acceptance; Time Deposits etc. All these must be in currencies that are freely convertible.

Eligible Counterparties

Those having very high credit worthiness, defined as a counterparty having rating of not less than A or equivalent by at least two of the three rating agencies Moody's, Standard & Poors and Fitch.

Liquidity Constraints

Portfolio holdings should be liquid enough to be sold on three days' notice, without resulting in a material impact on market prices as a result of the liquidation. All instruments in the portfolio must have a secondary market.

Credit Risk Limit

The maximum exposure to any one single issue will be limited to 5% of the market value of the portfolio, and it is not allowed to buy more than 20% of any single issue. No investment should be made in investment instruments with an issue size below US\$500 million.

V) MONITORING, CONTROL

AND COMPLIANCE

There is an office called Risk Analysis and Control in Foreign Operations Department of CBN that is saddled with the monitoring of the compliance with the criteria set out in the Investment Policy and Guidelines to control some of the risks that have been identified above. Some of these controls are stated below:

Liquidity Risk Control

Liquidity risk is controlled by:

- i) Establishing an adequate liquidity portfolio consisting of treasury bills, term deposit and other eligible short term instruments designed to meet short term payment obligation and;
- ii) Maintaining conservative cash flow projection based on projected external payment and expected inflows

Credit Risk Control

At the policy level, credit risk is controlled by the Investment Policy, which restricts the universe of acceptable investments based on the type of obligor, rating and maturity of the obligation. There is a maximum limit on the proportion of the reserves that can be kept in the form of term deposits with the commercial banks while the balance is kept in the form of fixed income securities issued or backed by full guarantee of sovereign governments or international organizations.

For transactions with commercial banks, credit risk is controlled by:

- i) Establishing a maximum global limit, expressed as a percentage of total external reserves, that can be invested with all commercial bank counterparties;
- ii) Adhering to a minimum acceptable credit risk rating for each commercial bank counterparty, based on at least

two recognized credit rating agencies. The minimum acceptable credit risk ratings are set out in the CBN Investment Guidelines and shall be reviewed periodically in line with market developments;

- iii) Establishing individual exposure limits for each commercial bank, expressed as a maximum amount which can be lent to that bank at any particular time;
- iv) Establishing a maximum limit for the maturity of all term deposits placed with commercial banks.

On an operational basis, a credit risk unit should monitor on a regular basis any migration in credit ratings and adjust the authorized exposure limits accordingly.

Market Risk Control

There are two areas of market risk that need to be controlled, the Price risk and the foreign currency risk.

Price risk is controlled by:

- i) Establishing and observing the target duration of the portfolio and the deviation limits from the target;
- ii) Setting limit exposure to other significant market factors such as credit spread

Foreign currency risk is controlled by:

- i) Establishing and observing a target currency benchmark;
- ii) Establishing and observing deviation limits from the target benchmark.

Operational Risk Control

Internal operational risks are controlled by:

- i) Establishing appropriate segregation of duties between Portfolio Management, Compliance, Monitoring & Control and Settlement &

- Accounting functions.
- ii) Delegation of specific and clearly defined responsibilities and accountabilities to each section.
 - iii) Establishing a code of ethics governing staff conduct while performing official duties; and
 - iv) Ensuring adequate Information Technology (IT) support for reserve management operations.

The Role of Internal Audit

According to guidelines issued by the International Monetary Fund (IMF) in 2001, part of the major responsibility of Internal Audit is to ensure the effective monitoring of investment operations and related risks, and to develop appropriate procedures to control such risks. The particular areas of focus include:

- i) Evaluation of the success or otherwise in the achievement of strategic reserve management objectives;
- ii) To ensure that management has identified the relevant risks and associated policies for their control;
- iii) The adequacy of internal control in addressing risks, and monitoring compliance with procedures and controls;
- iv) The existence of proper

robust risk management framework for the investment of external reserves of the nation cannot be over emphasized.

safeguards to protect assets, including regular reconciliation, and verification of assets;

- v) The reliability, security and integrity of IT systems; and
- vi) The accuracy of accounting records and processes.

VI) CHALLENGES TO RISK MANAGEMENT

Training and Retention of Staff

Reserve Management task is becoming more complex as central banks are moving into new asset classes with higher risk/return profile in search of higher risk adjusted returns. The CBN is presently moving from its traditional investment in money market instruments such as time-deposits, treasury bills etc into longer dated instruments like treasury and agency bonds. Although, these are instruments having explicit guarantee of a sovereign government, they however have market risk. This development has necessitated the need for highly skilled personnel who could measure and control the associated risks. No doubt effective risk management requires staff with forecasting and analytical skill. Although the Bank is making efforts to develop capacity in risk management, the challenge is how to retain these staff in view of

the high demand for their skills in the private sector.

Provision of Portfolio Management System

In order to enhance the efficiency of the risk management operations, it is imperative to have necessary analytical tools. CBN is already working on acquiring a robust Portfolio management system which will be used in measuring the performance of the portfolio against a benchmark as well as generating holdings and risk reports. All these are geared towards effective management of the reserves.

VII) CONCLUSION

Different organizations run different types of risk, but most would probably put the loss of money and reputation at the top of their list. This is especially the case for central banks around the world. The loss of reserves by any central bank will in most cases be public fund; this will in turn affect the bank's reputation.

Central Bank of Nigeria is no exception, more so as the Bank moves from hitherto investment in short term money market instruments into longer dated instruments like agency bonds. Therefore, the need to have a

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EXTERNAL RESERVES MANAGEMENT IN NIGERIA



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INTRODUCTION

External reserves management is an important activity in most Central Banks. Sound reserve management strategies strengthen the public's confidence in official policy and also contribute to successful macro-economic management. Since the financial crisis that occurred in the 1990s and early 2000s, many emerging and developing market economies have more than doubled their build-up of reserves. World reserves have risen from US\$1.20 trillion in January 1995 to above US\$4.00 trillion in January 2006, growing particularly rapidly since 2002 (ECB, 2006).

The impressive pace of global reserve growth has become an important issue and subject of controversy on the international policy agenda. The first school of thought that have emerged in the recent debate about external reserve accumulation, points out that holding a lot of reserves is

costly and that the yield on reserves is much lower than the potential return they could earn by using them to make real investments in the economy. According to this school, countries, especially the Emerging Market Economies, could progressively lessen their need for reserve accumulation by developing policies such as: structural and macroeconomic measures to foster domestic demand; financial system reforms both at domestic and regional levels, including bond market development; a well sequenced shift towards greater exchange rate flexibility, coupled with money market reforms and, possibly, financial account liberalisation; and regional economic surveillance and monetary cooperation which, *ceteris paribus*, would reduce the need for unilateral reserve accumulation. The second school, supports holding large reserve balances on the grounds that the cost of doing so is small compared to the economic consequences of a sharp depreciation in the value of the currency that is often associated with financial crisis in emerging markets. According to this school, a devaluation of the currency raises a country's costs of paying back debt denominated in foreign currency as well as its cost of imported goods and it also raises the spectre of inflation. By having its own ammunition to defend its currency in a crisis, a country with large reserve holdings avoids being shut out of international capital markets due to concerns that the government or the private

sector will default on foreign debt payments. Therefore, large reserve stockpiles is prudent policy for the occasions when defending the value of the currency becomes expedient.

Whatever the pros and cons for holding reserves may be, external reserves are held in support of a range of objectives including: facilitation of monetary and exchange rate management including the capacity to intervene in support of the national currency; limiting external vulnerability by maintaining foreign currency liquidity to absorb shocks during times of crisis; assisting the government in meeting its foreign exchange needs and external debt obligations and maintaining a reserves for national disasters and emergencies (IMF, 2001).

In many cases, reserves are a major national asset which calls for sound management. Not only has world reserves increased dramatically in recent years, but the way they are managed has also evolved over time. The objective of this paper, therefore, is to review external reserves management in Nigeria in the context of the IMF Guidelines for Foreign Exchange Reserve Management. Following the financial crisis that occurred in the 1990s and early 2000s, the IMF guidelines were developed in close collaboration with reserve management entities from a broad group of member countries and international institutions in a comprehensive outreach process. The guidelines are designed to help strengthen the international financial architecture, to promote policies and practices that

contribute to stability and transparency in the financial sector and to reduce external vulnerabilities of member countries.

Following this introduction the rest of the paper is structured into four sections. Some conceptual issues are presented in section II while section III discusses the country experiences in external reserve management. Section IV examines the evolution and process of external reserve management in Nigeria. Section V concludes the paper.

2.0 CONCEPTUAL ISSUES

2.1 What are External Reserves?

The International Monetary Fund (IMF) defines external reserves as the external assets readily available to and controlled by the monetary authorities for direct financing of payments imbalances, for directly regulating the magnitude of such imbalances through intervention in exchange markets to affect the currency exchange rate, and/or for other purposes. According to Rasheed (1995), external reserves of a country are the financial assets available to the government to meet temporary imbalance in the external payments; to intervene in its foreign exchange market in defence of its exchange rate; and, to settle obligations arising from international trade, financing contracts, diplomatic relations, etc. Aizenman (2005) was of the view that external reserves are the liquid external assets under the control of the central bank. In general, reserves have been defined as liquid financial assets that a country holds to meet obligations arising out of balance of payments transactions as well as intervening in the country's foreign exchange market. They are also seen as the stock of foreign exchange acquired from

international transactions and available to the monetary authorities. In other words, they are stocks of savings from foreign exchange transactions between the residents of an economy and the rest of the world during a given period of time that are held and controlled by the monetary authorities (Obaseki, 2007).

Based on these definitions, it can be inferred that any asset which is available to the monetary authorities of any country in case of need, and which is acceptable by her potential creditors in the international market qualifies as an external reserve asset. The following are thus regarded as components of external reserves:

- i. official gold holdings;
- ii. convertible foreign currencies;
- iii. reserve position in the IMF; and
- iv. Special Drawing Rights (SDRs)

A country's external reserves are usually managed by her monetary authorities. In most countries like Nigeria, the central bank manages the reserves.

2.2 Rationale for Holding External Reserves

Recent literature attributes external reserves accretion by most countries to self-insurance and precautionary motives. Some writers have observed that the financial integration of developing countries has increased their exposure to volatile short-term inflows of capital which are subject to frequent sudden stops and reversals (Edwards, 2004). Looking at the 1980s and 1990s, Aizenman and Marion (2004) pointed out that the magnitude and speed of the reversal of capital flows throughout the 1997-98 Asian financial crisis surprised most observers. In retrospect, the 1997-98 crisis exposed hidden vulnerabilities of East Asian

countries, forcing the market to update the probability of sudden stops affecting all countries. The above observations suggest that external reserves accretion can be viewed as a precautionary adjustment, reflecting the desire for self-insurance against exposure to future sudden stops and reversals of short-term inflows of capital.

Another version of self-insurance and precautionary demand for external reserves follows the earlier work of Ben-Bassat and Gottlieb (1992), which viewed external reserves as output stabilizers. Essentially, external reserves can reduce the probability of an output drop induced by a sudden outflow of capital. Typically, countries hold foreign exchange reserves for the following reasons:

a) To Provide Liquidity for Settlement of Transactions

Reserve holdings provide an important policy option in the event of a serious liquidity problem in the foreign exchange market. For most countries, especially those with known import bills for the authorities to meet, it can be sensible to plan financing using reserves. This is particularly the case when either foreign exchange receipts or inflows are irregular or show a seasonal pattern. In these cases the reserves can be used to smooth out the payment schedules. By helping to provide liquidity and restore order, foreign exchange intervention might help to limit the damage to the economy.

b) As a Tool of Exchange Rate or Monetary Policy

Usually, countries use external reserves to maintain a fixed exchange rate policy. Also, countries may choose to use the foreign exchange markets to affect domestic monetary policy, by supplying domestic currency to the market or buying it in the

market against foreign currencies. This will affect the domestic money market balance and so domestic interest rates, which are useful tools for the exercise of monetary policy. In some cases, foreign exchange crisis can lead to, or at least be associated with a banking sector crisis. In such a situation, access to international financial markets will likely prove problematic and/or expensive and intervention may well prove the best means by which to re-establish the foreign exchange market thus minimising both the disruption to business and the nation's cost of capital.

c) Servicing Foreign Currency Liabilities and Debt Obligations

Foreign currency is needed when debt servicing falls due, to avoid a default. While it would be possible to meet this need for foreign currency by buying it in the market i.e. selling domestic currency, when the need arises, this is not a course that many countries pursue for several reasons:

- i. the foreign exchange market might be unfavourable as at the time that foreign currency is needed;
- ii. the transactions might be disruptive to the markets;
- iii. the strategy entails large open currency risks on the liability portfolio; and
- iv. the country's credit rating by agencies diminishes and as a result, becomes less attractive to foreign lenders.

Reserve holding at least helps a country involved in foreign borrowing to service part of its foreign debt obligations which have fallen due and thus retain credit worthiness. For instance Nigeria recently, exited her debt obligations to the Paris and London clubs of international creditors, using this approach. Also, a respectable level of

reserves serves as a notice to the international community that a country's economic prospects are good. This tends to enhance international investor confidence and attract foreign investment into the country.

d) A Defence against Emergencies or Disaster

Reserves can serve as a defence against emergencies or disaster, by acting as a fund to finance recovery and rebuilding of the economy. This is particularly so for small countries hit by an adverse terms of trade whose causes are exogenous. For such countries, external reserves provide initial shock absorbers and capacity for borrowing.

e) Investment Fund

Investment fund, for many countries is a logical reason for holding external reserves. This is particularly the case where the local currency cannot absorb more spending without overheating or where the windfall profits would otherwise disrupt the domestic economy. Also, the country may opt to invest the excess windfall in preparation for a less certain future as well as to diversify the asset base.

2.3 Cost of Holding External Reserves

In calculating the cost of holding reserves, it is important to recognise that reserves do provide some return. The cost of holding reserves is therefore the difference between the opportunity cost and the real return on reserves. The portion of reserves held as interest bearing deposits, or as the short term government debt of the USA and other nations that supply reserve currencies, will typically earn some positive real rate of interest. Central Banks hold their foreign exchange reserves mostly in the form of low yielding short term US Treasury (and other) securities. Each dollar of reserves that a

country invests in these assets comes at an opportunity cost that equals the cost of external borrowing for that economy.

The fact that nations now have a much higher ratio of reserve holding to GDP would not be of much consequence if there were no cost to holding reserves. However, the cost is in fact quite substantial. As Neely (2000) and Ben-Basset and Gottlieb (1992) have pointed out, the opportunity cost of reserves holdings is the marginal product in the nation holding the reserves. This point can be seen by examining the process through which nations acquire reserves. In order to increase its holdings of reserves, a nation must manage to run a balance of payments surplus. The net increase in reserve holdings is the extent to which the total amount a nation receives in foreign currency exceeds the total amount it pays out for these purposes. Put differently, the increase in reserves is equal to the surplus of national savings or investments, plus the net inflow of foreign investment and aid. A dollar that is added to reserves is a dollar that could otherwise be spent on investment.

Other costs include the balance sheet risks arising from the appreciation of the local currency, which lead to the depletion of the value of external reserves. Also, if reserves create a false sense of security, the incentive to tackle difficult reforms may be reduced. Rapid reserve accumulation may also complicate the formulation of monetary policy under flexible exchange rates.

2.4 Dimensions of Reserve Management

The management of external reserves has two major dimensions, which include 'Adequacy of Reserves' and 'Optimal Deployment of Reserves'.

a) Adequacy of Reserves

Grubel (1971) suggests that the choice of reserve adequacy is influenced by the quantity theory of money. Since governments require cash to even out receipts and payments, the analogous measure is thought to be imports. Even though the analogy might not be perfect, the reserve-to-import ratio is still useful in today's discussion about reserve adequacy. For instance, Boorman and Ingves (2001) point out that reserve should be sufficient to pay for three or four months of imports. The reserve-to-import ratio or import coverage is thought to be a target of countries as part of their reserve management policies. On the other hand, Heller (1966) in an oft-cited article first analysed the needed level of reserves in terms of a rational optimising decision. The optimal reserves level is defined at that point where marginal utility equals marginal cost. He also argues that his approach leads to a more reliable and consistent index of reserve adequacy than some simple reserve-to-import ratio.

Meanwhile, the notion of reserve adequacy has changed with the onset of currency and financial crises in the late 1990s. Calvo (1996) suggests that a country's vulnerability to crisis should be measured, in part, by the size of its money supply, defined broadly, relative to its reserve holdings, since broad money reflects a country's potential exposure to the withdrawal of assets. Thus, broad money would be an appropriate scaling variable.

It has been increasingly recognised that it is necessary to take into account the vastly increased importance of capital flows for emerging market economies, and to relate the size of reserves to a country's short-term external debt. Greenspan (1999) proposed using short-term debt (debt with less than one year to maturity) as a measure for reserve adequacy. The argument

Greenspan uses is that reserves must be sufficiently adequate to instill confidence in global creditors. He also suggests that the ratio of short-term external debts to reserves is the best indicator of how a country's reserves will hold out during periods of international contagion and that this ratio should be used to determine an adequate reserve level.

In the light of the foregoing, the following measures of reserve adequacy are often considered:

i) Reserve/Imports Ratio:

This approach relates the reserve levels of a country to the value of the country's imports. The idea is that the reserve level at any point in time should be enough to finance at least three to four months of imports.

ii) Reserve/Money Supply Ratio:

This ratio assumes that the adequacy of reserves is related more to the domestic money supply than to imports. The reasoning is that a reduction in reserves is equivalent to an excess of aggregate expenditures in the economy over aggregate receipts. Such excess spending is reflected in a reduction in cash balances, suggesting that balance of payments deficits and reserves losses should be interpreted essentially as monetary phenomena. Reserve levels should, therefore, increase as money supply increases so that the country may be in a position to finance increased demand for imports.

iii) Reserve/Central Bank Liabilities: This approach basically regards Central Bank's demand liabilities as being highly related to the external sector. On this premise, it postulates that the adequacy of international reserves can well be assessed by looking at the relationship

between reserves and Central Bank's demand liabilities. But the rate of growth of the Bank's demand liabilities may in fact be due to the type of domestic monetary policy being pursued during the period.

b) Optimal Deployment of Reserves

Optimal deployment of reserves requires that, whatever the level of reserves a country maintains, her Central Bank (which is the 'manager' of her reserves) should ensure that maximum benefit is derived from it. External reserves are thus kept in liquid and secure assets as well as efficiently distributed among reserve currencies. In both cases, the central bank is seen to be solving an optimisation problem, maximising the benefits or returns on reserves held in the form of securities of selected countries, and minimising the cost of each unit of reserves held either in the form of liquid or interest yielding assets.

External reserves are distributed among reserve currencies according to their relative strength, confidence and stability. The efficient dispersal of a country's reserves demands that they be held in such currencies as would not entail frequent conversion into other currencies when making payments, because such conversions involve much loss through exchange rate fluctuations. Therefore, the currencies in which reserves are held should be selected with the country's trade pattern in view, so that payments are made conveniently with certainty and without avoidable loss of value to reserves. Furthermore, in order not to keep the reserves idle, they should be invested in interest earning assets so as to generate maximum possible income. Since the monetary authorities of the country is seen to be solving a kind of optimisation problem, it will consider factors like rate of return

or yield on interest earning assets as well as inflationary expectation in the domestic economy of the reserve currency country and also for the cost of conversion into the traded currency of the same reserve currency country. The degree to which the country will shift her portfolio of assets into or out of non-interest yielding assets will depend on the anticipated rate of return on alternative assets which are rather interest-yielding. But the goal of policy at all times will be to hold the asset portfolio which offers an optimum combination of financial returns and an acceptable level of risks.

3.0 COUNTRY EXPERIENCES IN EXTERNAL RESERVES MANAGEMENT

Before looking into recent developments and framework for reserve management in Nigeria, it is pertinent to briefly review the frameworks adopted by other jurisdictions in reserve management. In many countries, reserve management practices are based on the IMF Guidelines for Foreign Exchange Reserve Management approved in 2001 by the Fund's Executive Board. The guidelines which are informed by country practice are intended to assist governments in strengthening their policy frameworks for reserve management so as to help increase their country's resilience to shocks that may originate from global financial markets or within the domestic financial system. The aim is to help the authorities' articulate appropriate objectives and principles for reserve management and build adequate institutional and operational foundations for good reserve management practices. In doing so, the guidelines serve to disseminate sound practices more widely, while recognizing that there is no unique set of reserve management practices or institutional arrangements that is best for all countries or situations.

According to the Fund, the guidelines are intended primarily for voluntary application by members in strengthening their policies and practices. They could also play a useful role in the context of technical assistance and, as warranted, as a basis for informed discussion between the authorities and the Fund on reserve management issues and practices. Although institutional arrangements and general policy environments can differ, surveys of actual practices indicate that there is increasing convergence on what are considered sound reserve management practices. The broad areas covered by the guidelines include: (i) clear objectives for the management of reserves; (ii) a framework of transparency that ensures accountability and clarity of reserve management activities and results; (iii) sound institutional and governance structures; (iv) prudent management of risks; and (v) the conduct of reserve management operations in efficient and sound markets. Most of the countries reviewed in this paper were part of the recent examples of best practice in external reserve management, on which the IMF undertook a study in 2003.

a) Israel

Israel's foreign reserves are owned and controlled by her central bank - Bank of Israel, which is the 'reserve management entity', as defined by guidelines. Within the Bank, the Foreign Currency Department is responsible for performing the reserve management function, under the direction of the Governor of the Bank. Among the reasons for holding the reserves portfolio by the Bank are: Reducing the probability of a crisis in the local foreign-exchange market, providing a strategic reserve of liquidity, improving the standing of the

country in international capital markets and providing the government with a degree of flexibility in managing the composition of public-sector debt.

The Bank's investment policy has been developed on the basis of preserving the real external purchasing power of the reserves; earning a reasonable rate of return on the portfolio and accumulation of information and expertise, perceived to be of value to other core functions of the Bank, such as the formulation of monetary or exchange-rate policy.

The Bank of Israel's investment policy provides for conservative limits on portfolio's exposure to various financial risks, the main ones being currency risk, interest-rate risk and credit risk. As is true of many official institutions, the Bank of Israel's sensitivity to credit risk is greater than its sensitivity to other financial risks. The Bank uses a variety of tools to manage the credit risk of the reserves portfolio. Of these, the most important is the system of limits and quotas, which defines for each institution, the maximum quantity of various types of credit exposure which may be assumed. It sets the minimum levels of credit quality for individual institutions of various types and also ensures appropriate diversification across firms and countries, in line with their relative size and credit quality. The Bank's investment policy defines a risk-neutral benchmark portfolio for the reserves, and limits the deviations of the actual portfolio from the benchmark in terms of the various financial risk factors. The Bank's most significant move in recent years to enhance the quality of its reserve management and to improve transparency and accountability was its decision to acquire a new portfolio management

information system, which extended over more than three years and involved direct and indirect costs of well over US\$1 million.

b) Japan

Reserve management in Japan is still strictly considered from a policy viewpoint, and in fact is conducted along the passive guidelines by the Ministry of Finance (MoF), i.e. with limited sensitivity to the risk/return trade-off. Interventions on currency markets are carried out by the Bank of Japan (BoJ) on behalf of the MoF. Like many Asian countries, investment in new instruments has become an important feature of reserve management in Japan. The investment spectrum, which was mostly limited to time deposits and government bonds until a few years ago, now includes other interest rate products, such as interest rate derivatives and debt instruments bearing a spread over US Treasuries; and sometimes even equities. One approach adopted in order to foster diversification along the yield curve and across asset classes, is to split foreign reserves into a liquidity portfolio and an investment portfolio.

c) Korea

The Bank of Korea (BoK) holds foreign exchange reserves to maintain a capacity for intervention in the foreign exchange market, to cope with internal and external shocks, and to preserve the value of the national wealth. Therefore, the BoK puts the focus on safety and liquidity, while also endeavoring to generate high returns. The foreign reserves that the BoK currently manages are the portion of Government and BoK assets which are readily available for foreign payments. These assets consist of foreign currency-denominated fixed income

instruments, deposits, gold and SDR.

Since 1997, the BoK has separated its reserves into three different tranches and established different benchmarks for each tranche. The entire liquidity tranche is composed of a single currency, U.S. dollar, as most of the foreign exchange transactions are settled in U.S. dollars, and the U.S. money market is very well developed. The investment tranche is determined considering i) the currency composition of the Government's and the BoK's foreign debt, ii) the currency composition of the current account payments, and iii) the size of the global sovereign bond market. In addition, other central banks' currency compositions are also used for reference.

In July 2005, parts of the reserve holdings of Korea were transferred to a separate entity the Korea Investment Corporation (KIC) with the aim of seeking higher yields. KIC to some extent is seen as the external manager mandated by the BoK with the foreign reserve assets remaining on the balance sheet of the BoK. The BoK retains the option to recall the assets in the event of an emergency, meaning that the funds would effectively be retained by the central bank as external reserves while being entrusted to the KIC for management.

d) Norway

Norway's central bank Norges Bank's external reserves comprise of the foreign exchange reserves, gold reserves and claims on the IMF. The overall responsibility for operations rests with the Executive Board, which sets the overall strategic guidelines (including major risk limits) and receives quarterly management reports. Until 2000 the Executive Board delegated to the Governor to define the

benchmark portfolios and the limits for relative risk, as well as credit risk.

The reserves are split into four sub portfolios: the liquidity portfolio, which is used in connection with the conduct of monetary policy (for potential foreign exchange interventions and to influence liquidity and interest rates in the Norwegian money market); the long-term portfolio or investment portfolio, which is available for market operations, but invested on the basis of more long-term considerations; the immunization portfolio, which is equivalent to government foreign currency debt and is intended to neutralize foreign exchange and interest rate risk associated with this debt; and the Petroleum Fund buffer portfolio which receives capital daily, and is transferred to the Government Petroleum Fund (GPF) on a monthly basis. The GPF, formally a government account at the Norges Bank and managed under the fiscal guidelines, receives most of the petroleum revenue and invests it in foreign financial assets. The guidelines were meant to preserve the capital of the GPF for future generations, ensure that some petroleum revenue is spent now (finance increase in old age pensions), and insulate the budget against sharp changes in petroleum revenues.

e) Oman

In Oman, reserve management objectives are three-fold: provide liquidity for intervention in the local foreign exchange market; earn reasonable rates of total return without exposing the reserves to excessive credit and market risks; earn good current income so as to achieve healthy accounting profit. The reserve management policy objectives have been designed primarily with a view of optimizing U.S. dollar resources to provide a credible cushion against current and capital account shocks, while

at the same time clearing the local foreign exchange market on a day-to-day basis. The Central Bank does not target any particular level of reserves. Currently, the external reserves are divided into four sub-portfolios or tranches: liquidity; bridge; income and bullion tranches.

In Oman, foreign currency revenues of the government, arising mainly out of export of oil and gas are generally sold to the Central Bank against Rial Omani which serve as inflows into the reserves and are thus monetized. Any revenue of the government in excess of the budgeted prices of oil and gas are kept separately in a fund, to be utilized if there is a budget short-fall subsequently. This portion of the external reserve of the country is owned and managed directly by the government. The name of the fund is State General Reserve Fund (SGRF). There is an institutional arrangement for consultation between the Central Bank and the SGRF on various investment-related issues, like composition of benchmark, portfolio performance etc.

f) Singapore

The external reserves of Singapore are managed by the Monetary Authority of Singapore (MAS), which also sets exchange rate policy. In order to instil adequate confidence in its exchange rate policy, the MAS operates a Currency Fund which holds external reserves at least as large as the total of domestic currency in circulation. The bulk of Singapore's reserves are held in the General Reserve Fund. Together, these two funds make up the financial assets and liabilities of the MAS. In response to the rapid growth of Singapore's external reserves holdings, the Government of Singapore Investment Corporation (GIC) was established in the 1990s to manage the portion of reserves

for non-intervention related purposes, which is clearly disentangled from the country's reserves. The main objectives of these moves are to achieve higher long term returns and to preserve the assets' value for future generations (hence the funds are sometimes referred to as 'future generation' or 'heritage' funds). The pool of eligible instruments used to invest these funds often differs quite substantially from the one used by traditional reserve managers, and includes, for example, equities, corporate bonds and special forms of investment. The GIC's other objective is to foster the domestic asset management industry.

g) Tunisia

According to the Tunisian law, management of foreign reserves comes under the Tunisian central bank's purview. The strategic reserves management objectives of the Central Bank of Tunisia (CBT) are based on the need to guarantee external liquidity of the economy, preserve the reserve holdings and maximize the return on reserves. Liquidity of reserves is the main management objective of the CBT. Liquidity is required to ensure financing of external payments imbalances and to intervene in the local exchange market, in order to avoid sharp adjustments of Tunisian dinar exchange rate. The liquidity objective is met by targeting appropriate investment instruments and currency structure. In order to safeguard reserves, the CBT has implemented a rigorous selection policy of markets, assets and counterparts. In addition, an operating control system is in place to monitor exposure limits for credit and market risks.

The CBT's investment policy focuses on a dynamic allocation of reserves, using permissible instruments, in line with

international capital markets. Strategic decisions on overall objectives and principles of reserves management policy are set by the Governor of the CBT on proposal of relevant departments of the Bank. To enhance the efficiency of reserves management policy and to trim down operating risks, CBT has implemented an appropriate operational system based on risk exposure limits, cautious and prompt settlement processing, control measures and frequent reporting. This operational system is managed by means of a computer system. This system integrates the management of front and back office functions, and accounting of the operations in international capital markets. The system also provides a large range of activity such as treasury and statistical reports. These reports allow control of transactions processing and follow-up of risk and return management tools such as limits, duration and performance.

h) United Kingdom

United Kingdom official holdings of international reserves are owned by Her Majesty's Treasury (HMT) and comprises of gold, foreign currency assets, IMF Special Drawing Rights (SDRs), and the UK's Reserve Tranche Position (RTP) at the IMF. These reserves are held in the Exchange Equalization Account (EEA) which was established in 1932 as a fund for stabilizing the exchange value of sterling. The Bank of England (BoE) manages the reserves as agent for HMT, as well as providing advice on reserves management issues, including liability management. The BoE manages the reserves in accordance with the criteria set out by HMT in annual remit, the main text of which is published in the Debt and Reserves Management Report, which is published by HMT at the time of

the budget. The remit summarises the benchmarks which the reserves are actively managed against; the investment constraints within which the Bank operates; the framework for risk control; and the arrangements for the audit of the EEA. The Bank also set a profit target, net of management costs, for active management against the benchmark; this is not published.

The presentation and accounting basis of the UK reserves has changed radically in recent years. The United Kingdom has been at the forefront internationally in promoting openness and transparency in reserves data. Since April 2000, reserves data have been published on a monthly basis in accordance with the IMF/G10's Special Data Dissemination Standard (SDDS). The statutory obligation of the EEA dictates that investments must be highly liquid, so they may be made available quickly for intervention purposes if necessary. To determine the benchmark asset allocation for the EEA, the Bank employs an asset allocation model that explicitly trades-off liquidity and return: the model determines an asset mix that maximizes expected return for given levels of expected liquidation costs. The management of the reserves also involves exposure to the creditworthiness of banks and of the issuers of sovereign, supernatural or commercial paper. The credit worthiness of these entities is therefore subject to regular scrutiny by the Bank. Although the Bank takes account of published Agency ratings, it sets its own internal limits, which limits the exposure to each bank and issuer in terms of both amount and maturity. Such exposures are monitored in real time against the limits. In addition, there are limits to contain exposure to each country's banking system and instrument types.

4.2 Some Key Issues from Country Experiences

Although, practices adopted in external reserves management vary at times according to countries' institutional frameworks, risk appetites, skills and resources, the core principles underlying reserve management however, are very similar. While investment in new instruments has become an important feature of reserve management in some countries, given the advantage of enhancing returns, the pace of diversification has however, not significantly altered the tradition of investing in US Treasuries, given safety and liquidity constraints. The percentage of foreign reserves not invested in interest rate products is still negligible. With respect to currency diversification, the US dollar still accounts for the bulk of reserve currencies in global foreign exchange assets, as most countries have continued to use the US dollar as a vehicle for intervention, either primarily or exclusively.

An important development in recent years has been the increasing use of part of the foreign assets accumulated by the public sector for alternative purposes. The IMF however, does not count such uses of foreign assets as reserves since they are not related to foreign exchange policy targets. For instance, countries like Singapore and Korea have set up 'heritage funds' and investment corporations with explicit longer-term return oriented objectives. In a similar development, some oil-exporting countries have established oil funds in order to smooth fiscal revenues. Since oil prices and revenues are highly volatile and unpredictable, actual fiscal revenues in oil exporting countries often differ greatly from budget operations, meaning that,

in the case of shortfalls, either fiscal adjustment or financing is required. As a result, not only have several oil-exporting countries established such funds (e.g. Russia, Norway, Venezuela, Kuwait and Oman), but other oil exporters are considering doing so.

Oil funds can be classified in one of two categories: stabilization funds, designed to address the problems created by the volatility of oil revenues, and savings funds, established to save part of the oil revenues for future generations. In the case of stabilization funds, when oil prices are high a portion of oil revenues is channeled from the government budget to the stabilization fund. Conversely, when oil revenues are low the stabilization fund finances the oil revenue shortfall. In this context, a debate has developed about the effectiveness of stabilization funds in smoothing government spending. Empirical research from the IMF on past experience with oil stabilization funds suggest that, except in Norway, oil funds did not significantly affect the relationship between oil export earnings and government expenditure. The policy implication is that an oil stabilization fund can be no substitute for sound, medium-term-oriented fiscal policies (ECB, 2006). Although, the effects of these innovative ways of using foreign assets are yet to be fully appreciated, they create unprecedented bridge from monetary and exchange rate policy to fiscal policy. At the same time, converting short-term monetary or financial assets into long-term wealth holdings may provide a meaningful vehicle for diversifying risk exposure to US dollar assets in a gradual and orderly way.

4.0 EVOLUTION AND PROCESS OF EXTERNAL RESERVE MANAGEMENT IN NIGERIA

4.1 Evolution

Before the inception of the Central Bank of Nigeria in 1959, the country formed part of the defunct West African Currency Board (WACB). In that period, management of external reserves posed little or no problems to the country because the manner in which the Board operated prevented such problems from arising. Optimal deployment of reserves then was really not an issue since Nigeria's non-sterling earnings were deposited in London in exchange for credit entries in the sterling accounts maintained there (Aligwekwe, 1978).

Subsequently, the 1959 Act which established the Central Bank of Nigeria (CBN) required the Bank to hold external reserves solely in Gold and Sterling. With the amendment in 1962 of this Act, the Bank acquired the mandate to maintain the country's foreign exchange reserves not only in sterling balance but also in non-sterling assets such as gold coin or bullion, bank balances, bills of exchange, government and government-guaranteed securities of countries other than Britain and treasury bills in other countries. The monetary options available to the country widened upon joining the International Monetary Fund (IMF) in 1961 to include many more assets. The problems of reserve management began during the periods of the First National Development Plan in 1962 to 1966 and the Nigerian Civil war 1967-1970. In these periods, financing the plan and the war consumed a large portion of the country's reserves. Also, the tempo in the foreign trade sector dropped, following the disruption of economic activities in the country. The problems became compounded immediately after the war in the wake of the Federal Government's efforts to reconstruct and reactivate the

war ravaged economy which continued to demand immense foreign exchange reserves. Because of the exigencies of this period, the CBN became committed to maintaining an 'adequate' level of external reserves.

In addition to the problem of depleting reserves, Nigeria faced a new scenario with reserve management. Following the admission to the Organisation of Petroleum Exporting Countries (OPEC) in 1973 and the oil boom of that era, the problem of reserve management switched from that of 'inadequate' to that of 'excess reserves'. This remained so until 1981 when the country was hit by the global economic recession that led to a consistent decline in her external reserves (Odozi, 1986). In the light of this development, economic stabilisation measures involving stringent exchange control, which ran from April 1982 to June 1986 (when accretion to external reserves was low), were introduced. By the end of 1985, it was evident that the use of stringent economic controls was ineffective in restraining external reserves depletion. To this end, exchange and trade controls were discontinued in 1986, following the adoption of market based policy measures the Structural Adjustment Programme (SAP) in July 1986. However, after more than seven years of liberalisation, government felt that the overall performance of the economy was unsatisfactory. Hence, in January 1994, some measures of control were re-introduced which saw the CBN as the sole custodian of foreign exchange and, together with its designated agents, the avenues for foreign exchange importation. Again the trade and exchange policies in 1994 failed to substantially achieve the desired objectives. The guided deregulation introduced in 1995, among other things, abolished the

1962 Exchange Control Act, in a bid to enhance the flow of capital and the reserves position of the country. Other measures aimed at boosting the external reserves included the introduction of an Autonomous Foreign Exchange Market (AFEM) for the purpose of trading in foreign currencies at market determined rates and further liberalisation of the foreign exchange system in 1997 and the trade and exchange regime in 1998.

4.2 Framework for External Reserves Management in Nigeria

The Central Bank of Nigeria under the (Amendment) Decree No. 41 of 1999 is empowered to use its best endeavour to maintain external reserves at levels considered by it to be appropriate for the monetary system of Nigeria.

Basically, preservation of capital; maintenance of adequate liquidity and maximizing the rate of return while ensuring that total risk remains at a suitable level consistent with the benchmark, are three main objectives of external reserves management by the CBN. Within these broad objectives, the Central Bank of Nigeria manages Nigeria's external reserves for the following reasons:

- i. To provide liquidity that is easily exchanged in settlement for transactions with the rest of the world;
- ii. To fund the Foreign Exchange Market with a view to having a stable exchange rate under favourable economic fundamentals;
- iii. To intervene in the foreign exchange market to stem growth in liquidity in the economy;
- iv. To enhance the countries international credit worthiness;
- v. To use the available stock of

- reserves as a buffer against external shocks and more recently;
- vi. To leverage on the reserves to develop the financial system through joint venture (partnership between foreign and Nigerian banks); and
 - vii. To earn income and preserve the value of the reserves.

The CBN Board oversees the management of external reserves. The Board's responsibility includes: periodic review of the investment policy and effecting changes, where needed; periodic review of the performance of the external reserves portfolio; and establishing the content, form and frequency of communiqués to the public regarding the management of external reserves. To achieve these responsibilities, the Board set up an investment committee, headed by the Governor, to formulate investment guidelines, currency composition and portfolio benchmark and risk management framework.

Nigeria's external reserves are composed of: Federation, Federal Government and CBN. The CBN portion consists of funds that have been monetised and shared. It is from this portion of reserves that the Bank conducts its monetary policy and defends the value of the Naira. The reserves portfolio is maintained principally in the US dollar. Currencies outside the US dollar are the Euro, the British Pound, the Japanese Yen, and the Swiss Franc. Like all other central banks, capital preservation is the most important objective of CBN's external reserves management (Olawoyin, 2007). In view of this, the CBN invests reserves mainly in government securities such as treasury bills and bonds, and in foreign banks with highest credit quality. Eligible investments include securities issued by the US Treasury or guaranteed by the US government; securities that

are obligations of the central governments of any OECD country, denominated in eligible currencies; securities of, or guarantees by international financial institutions of which Nigeria is a member, such as the World Bank, the International Finance Corporation and the African Development Bank, if such securities are expressed in eligible currencies; repurchase agreements fully collateralised by US government securities with a maximum maturity of 15 days and negotiable certificates of deposits, bankers' acceptances and time deposits that are direct obligations of banks whose short and long term debt ratings meet the stipulated credit quality requirements.

The performance of the portfolio is to be measured against a composite benchmark comprising 60 per cent six months LIBOR and 40 per cent Merrill Lynch Global 1-3 Years Index hedged to US dollar. Capital preservation is achieved by controlling and minimising the external financial risks (credit default risk, market risk and liquidity risk) and internal operational risks (risk of loss arising from breakdown in internal controls, unethical conduct and failure or inadequacy of information technology support for reserve management). In order to reduce concentration risk and enhance competition and return, the Bank has substantially increased the number of counterparties with which it places funds. These counterparties meet the minimum credit rating of the Bank.

Previously, the CBN solely engaged the services of external asset managers in the management of the country's external reserves. Following the recent banking sector reforms and the subsequent emergence of 25 adequately capitalised banks, the CBN took a new policy

stance which stipulates that external managers would henceforth manage the country's reserves in partnership with local banks. This is intended to encourage the transformation of local banks into significant players in the global financial markets through partnership and strategic alliance with strong foreign banks. This alliance would result in the acquisition of requisite skills and technology, which in turn will provide innovative financial services to the domestic market. Consequently, the Investment Committee at its meeting in September 2006, approved 14 Asset Managers to work with local banks in asset management.

The partnership that emerged between local and foreign banks include: Black Rock and Union Bank of Nigeria Plc., J.P. Morgan Chase and Zenith Bank Plc, First Bank of Nigeria Plc, which is partnering H.S.B.C. Group; Intercontinental Bank Plc, with BNP Paribas; UBA Plc and UBS, while Credit Suisse is to work with IBTC Chartered Bank. Also included are GT Bank Plc and Bank PHB Plc which have Morgan Stanley and Fortis respectively as partners, while Fidelity Bank, Access Bank, Oceanic Bank, Ecobank, Stanbic Bank and Diamond Bank Plc, have Investec, ABN AMRO, Cominvest, ING, Bank of New York, and Crown Agents in that order as partners.

For global custody and asset management, foreign banks will need to satisfy a set of requirements and guidelines set by the CBN. These include having a minimum long term ratings of AA- and A+, respectively, in the case of a custodian, or A and A+, respectively in the case of asset manager by any two international rating agencies of Standard and Poor's, Fitch and Moody's; possess a minimum track record of 5 years in the provision of custodial and/or asset management services and maintain a subsidiary in any of the

OECD countries where the currency is freely convertible and custody/asset management approval by relevant off-shore regulatory authority. A foreign bank that satisfies the above criteria and is interested in seeking CBN's mandate for external reserve management must be willing to enter into a strategic alliance in form of a partnership but preferably in a joint venture arrangement with at least one local bank in order to develop internal capacity in asset management. The strategic alliance arrangements should detail the areas of the joint venture or the kind of support to be provided in the partnership which should include but not limited to capacity building in the following areas: asset management; custodial services, other financial services and technical support.

The criteria for local banks to qualify for CBN mandate to manage a portion of the reserves include having a minimum of US\$1 billion share holders' funds; having a branch or subsidiary in an OECD country whose currency is convertible and a credit rating by the three international rating agencies, Standard and Poor's, Fitch and Moody's.

The Central Bank of Nigeria has intensified the process of

transparency in policy formulation and operational activities through the adoption of some of the IMF guidelines for foreign exchange reserves management. The Bank disseminates information to the general public through its websites as well as its quarterly/half yearly and annual publications. Information is also divulged through the Governor's conferences and press releases. The CBN in 2003 joined the World Bank's Reserves Advisory and Management Program (RAMP). The RAMP is both technical advisory program designed to build capacity in reserves management, as well as an asset management engagement allowing the World Bank to manage, for a fee, a portion of the external reserves of member central banks.

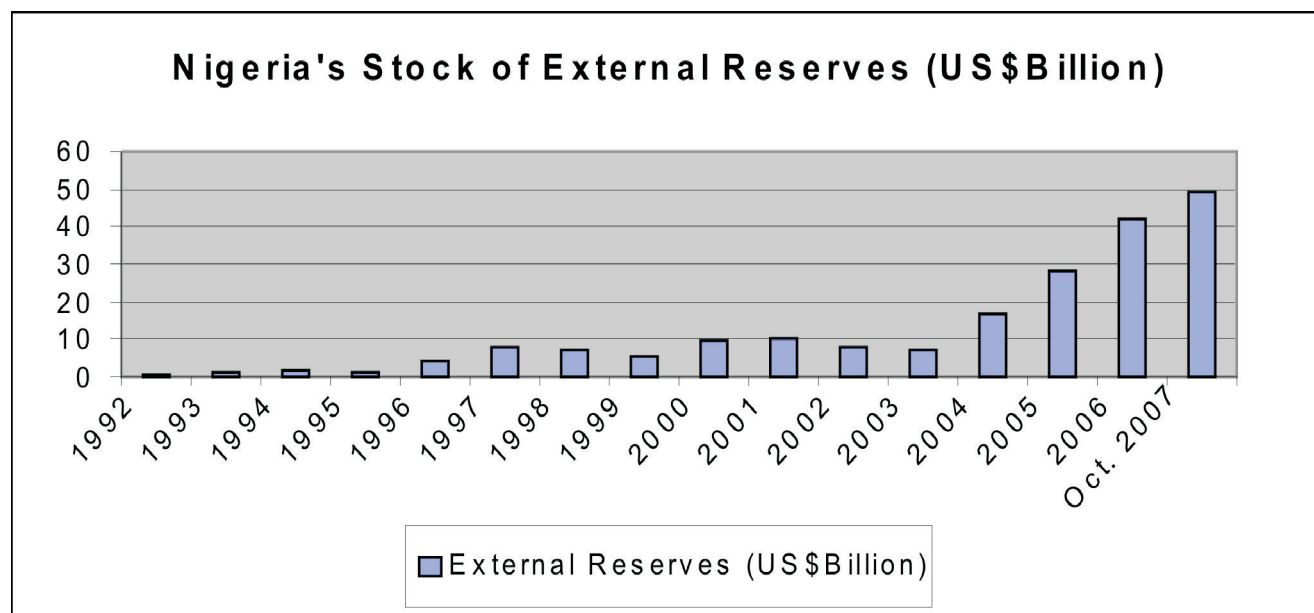
4.3 Recent Trends in Nigeria's External Reserves (1992 October 2007)

Nigeria's external reserves have been fluctuating over the years. Initially, the level rose from US\$0.70 billion in 1992 to US\$1.30 billion in 1993 and further to US\$1.70 billion in 1994. After falling by 17.70 per cent to US\$1.40 billion in 1995, external reserves rose by 192.90 per cent to US\$4.10 billion in 1996. In

1997, Nigeria's gross external reserves stood at US\$7.58 billion and dropped by 6.30 per cent to US\$7.10 billion in 1998. Reserves dropped further by 22.50 per cent in 1999 to US\$5.50 billion. End of year gross reserves declined by 23.30 per cent from end-December 2001 level of US\$10.42 billion to US\$7.99 billion in 2002. It declined further by 6.50 per cent to US\$7.47 billion in 2003. The level of reserves in 2003 could support 6.50 months of imports compared with 13.60, 12.00 and 10.10 months in 2000, 2001 and 2002 respectively. Reasons for the downward trend in reserves were the inadequacy of foreign exchange receipts, coupled with huge fiscal spending and the consequent pressure on the country's payments obligations. It must be mentioned that Nigeria is a monocultural economy with heavy reliance on crude oil whose price is exogenously determined. Hence, the reserves position of the country at any given point in time is usually a reflection of the circumstances prevailing in the international oil market.

Following the huge receipts from crude oil sales and the prudent fiscal and monetary policy stance under the National Economic Empowerment and Development

Chart 1



Strategy (NEEDS) introduced in 2004, trends in the country's reserves took a dramatic upward turn. The stock of external reserves which was US\$7.47 billion at end December 2003, increased by 127.00 per cent to US\$16.96 billion in 2004. The reserve position in 2004 could finance 18.40 months of imports. The import cover was much higher than the West African Monetary Zone (WAMZ) minimum requirement of 6 months. In 2005 the stock of external reserves increased further by 66.80 per cent to US\$28.28 billion. The reserve position could support 19.70 months of imports. In 2006, reserves rose to an all time high of US\$42.20 billion, supporting a staggering 28 months of imports. The Gross External Reserves as at end-October, 2007 was US\$49.12 billion. The current level of gross external reserves could support about 20 months of current foreign exchange disbursements.

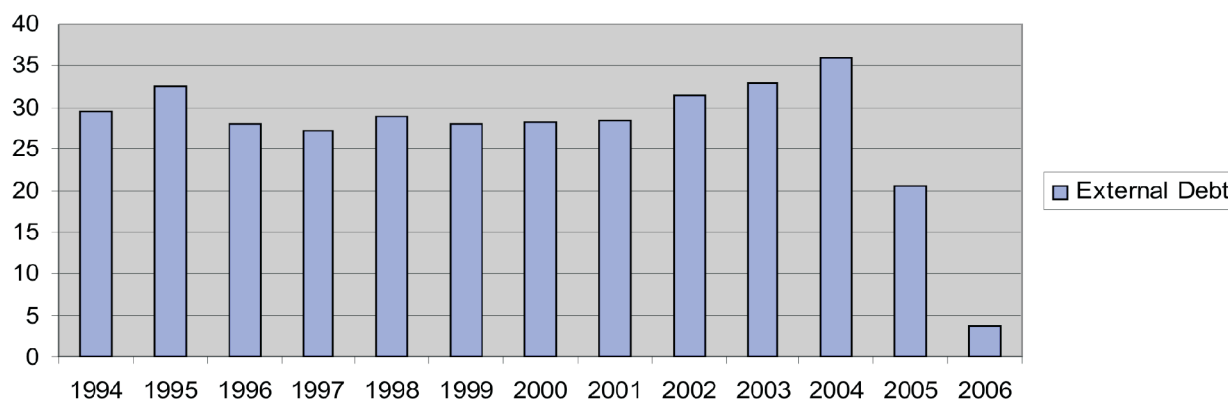
Efficiency in reserve management could be viewed beyond the months of import cover *per se*, to the actual amount saved in the year. In other words, the accretion to the external reserve account is very crucial in reserve management. In 1997, accretion to reserve was US\$3.50 billion. This saving was, however, not sustained in the subsequent years, resulting in a net draw down of US\$0.50 billion and US\$1.60 billion in 1998 and 1999 respectively. With the improvement in crude oil price in 2000, the external sector outcome resulted in an accretion of US\$4.50 billion, but this again dropped by US\$0.50 billion in 2001 and further by US\$2.43 billion and US\$0.50 billion in 2002 and 2003, respectively. This trend reveals the expenditure profile of government, in which years of huge savings or gains in the net position of foreign exchange transactions are followed by periods of increased expenditure, as reflected in the net flow position in the balance of

payments. Generally, a volatile fiscal policy is not consistent with a sustainable external reserves management. A prudent fiscal policy will enhance the viability of Nigeria's balance of payments and strengthen the stability of the exchange rate. With the combined effect of positive terms of trade occasioned by high international prices of crude oil and prudent fiscal policies that followed after 2003, the downward trend reversed with accretion to external reserves increasing by US\$9.49 billion, US\$11.32 billion and US\$13.95 billion in 2004, 2005 and 2006 respectively.

Countries that may be vulnerable to a capital account crisis can benefit from holding reserves sufficient to cover all debt obligations falling due within the coming year. This is relevant in measuring vulnerability to capital account crisis and prevention of currency crisis. In the Nigerian case, the reserve/debt ratio has been substantially low over the years. In 2005, however, the ratio

Chart 2

Nigeria's External Debt Profile (US\$Billion)



which stood at 1.40 exceeded the benchmark figure of 1.00 and rose to an all time high of 11.90 in 2006. Holding reserves beyond the recommended benchmarks will, other things being equal, probably reduce an economy's vulnerability to financial crisis. Though, it may do so with diminishing marginal benefit and

rising marginal cost.

5.0 CONCLUSION

The increase in the size of external reserves in recent years has made the choice of an adequate reserve management framework an important issue for central banks. It is necessary for such a

framework to: i) be consistent with the exchange rate policy features; ii) seek an efficient risk return trade-off; and iii) avoid market distortions.

The review of country experiences in reserve management and the framework adopted by Nigeria showed that the management of external

reserves in Nigeria largely reflects international best practice and developments in the financial markets. The CBN treads cautiously in the management of external reserves. The Bank is sensitive to issues of security and operational risk and strives to maintain high standards of practice in this area consistent with the norms of the

financial services industry in the developed world. In managing the country's external reserves, the Bank adopts the "optimal portfolio approach" and "market neutrality principle" as prescribed by the IMF by trying to minimize market risk while striving for the best return possible. To improve transparency and accountability, the Bank invests in appropriate

information technology aimed at enhancing the quality and efficiency of reserve data. It strives to maintain levels of transparency consistent with that in other parts of monetary policy operations. The need for an effective and efficient management of a country's external reserves cannot be overemphasised. Poor management of external reserves

APPENDIX:

Table 1: Recent Trends in Nigeria's External Reserves (1992 2007)

Year	Stock of external reserves (US\$ billion)	Percentage change in stock of reserves	Months of imports cover	External debt stock (US\$ billion)	Ratio of reserves/stock of external debt
1992	0.70	***	***	***	***
1993	1.30	85.71	***	***	***
1994	1.70	30.77	3.00	29.43	0.06
1995	1.40	-17.65	2.10	32.58	0.04
1996	4.10	192.90	7.60	28.06	0.15
1997	7.58	84.90	9.60	27.09	0.28
1998	7.10	-6.30	9.20	28.91	0.25
1999	5.50	-22.50	7.60	28.07	0.20
2000	9.90	80.00	13.60	28.27	0.35
2001	10.42	5.30	12.00	28.35	0.37
2002	7.99	-23.30	10.10	31.50	0.25
2003	7.47	-6.50	6.50	32.92	0.23
2004	16.96	127.00	18.40	35.94	0.47
2005	28.28	66.80	19.70	20.48	1.40
2006	42.23	49.20	28.45	3.54	11.90
Oct. 2007	49.12	***	***	***	***
Benchmark			3.00		1.00

Source: CBN Annual Report and Statements of Accounts (1997-2006) editions and CBN Statistical Bulletin, Vol. 16, Dec. 2005.

*** Not available.

may put at risk other elements of national policy, for example an official exchange rate policy which can cause severe economic damage. Hence, reserve management should seek to ensure that adequate reserves are available, such that, risks are controlled in a prudent manner and reasonable earnings are generated over the medium to long term on the funds invested.

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The Second Monetary Zone in West Africa: Progress and Challenges

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INTRODUCTION

One way of overcoming the macroeconomic instability that inhibits growth in developing countries is closer economic co-operation. However, it is not possible to talk seriously about economic cooperation without monetary and financial integration. The virtues of monetary and financial integration are now widely accepted. These include an expanded aggregate investment, improved resource allocation, increased domestic savings and enhanced financial intermediation as well as greater international trade. In addition, financial integration offers, through convertibility, greater stability for the common currency, savings in international reserves and greater freedom of choice between foreign and domestic goods, services and assets. Currently several monetary arrangements are being contemplated, see Appendix 1.

In recognition of the benefits of monetary co-operation, the Economic Community of West African States (ECOWAS) adopted a number of strategies to deepen monetary co-operation in the region. The establishment of the West African Clearing House (WACH) by Governors of Central Bank in 1975 and the adoption of the Monetary Cooperation Programme (MCP) of the Economic Community of West African States by the Heads of State and Government in 1987 represented concrete efforts at monetary cooperation and integration in the subregion. The MCP was expected to achieve three main objectives namely: the improvement of inter-regional payments system, notably the West African Clearing House (WACH); regional currency convertibility; and establishing of a single monetary zone. The transitional period of 1982-2000 was earmarked for the completion of the requisite legal, administrative and institutional frameworks for the realization of this objective. The ECOWAS Monetary Co-operation Programme (E-MCP) was originally billed for the period 1991-1994 and later extended to 2003. The E-MCP had as its objective the establishment of regional currency convertibility in the short term and the creation of a single currency in the long term. However, lack of commitment as reflected by the delays by member countries in the implementation of the programme resulted in several extensions of the dates for execution of major aspects of the programme. In addition, the creation of the

UEMOA by the countries in the CFA Zone in 1994 also hindered the advancement of the course of ECOWAS Monetary Cooperation Programme.

Against the above backdrop, at the 22nd Summit of the Authority of Heads of State and Government of ECOWAS held in Lome, Togo on December 1999, it was decided that a two track approach to ECOWAS integration programmes be implemented to accelerate the integration process in the sub-region. Consequently, Ghana and Nigeria held bilateral talks from December 19-20, 1999 at Accra, Ghana to discuss strategies and modalities for actualizing the objective. At the end of deliberations, two technical Committees, one on trade and the other on monetary issues were constituted to identify ways of accelerating the programmes in each sector. Following consultations with the Governments of The Gambia, Guinea, Liberia and Sierra Leone on the issue, a mini summit of the authority of heads of states and Governments of the six countries was held in Accra, Ghana on April 20, 2000 during which the Accra Declaration on the creation of the second monetary zone was signed. The meeting also established a task force to work on the process leading to the establishment of the West African Monetary Institute (WAMI). At the completion of the work of the Task Force, the Authority of the Heads of State of the countries participating in the second monetary zone, established WAMI during its meeting at Bamako, Mali, in December 2000. The Institute was expected to be a

forerunner for the Common Central Bank. The primary objective of the WAMZ is to pursue a single currency under the Fast Track Initiative. Within this arrangement member states are required to conduct their economic policies with the view to achieving the objectives of the WAMZ. In this regard economic policies, especially fiscal policy are to be coordinated.

The main objective of this presentation is to assess the progress as well as challenges facing WAMZ countries in the common monetary zone project. The remaining part of the paper is organized as follow: Part II dwells on theoretical and empirical issues regarding monetary and economic integration, Part III examines financial integration in the West African Monetary Zone, while Part IV contains an assessment of countries performance on the attainment of the convergence criteria of the WAMZ, while Part V adumbrates the challenges, recommendations and some concluding remarks.

2.0 Theoretical Issues and Empirical Issues

In theoretical debates on the monetary union emphasis is most frequently placed on the advantageous effects of its establishment on the economic growth of the member countries. In such conditions, growth in mutual trade is a result of the well-known effects of trade creation and trade shift. This is supposed to lead to specialization of production, sharpened competition and rise in the degree of standardization of its conditions, as well as to a reduction in production costs and product prices and a rise in the quality of goods. In particular, attention is drawn to the emergence of additional stimuli to economic growth, apart from those resulting from previous

stages of integration, such as the single market. Most broadly speaking, those growth-oriented stimuli are supposed to result from: sharpened competition in the single market as a result of intensifying trade and capital flows, which creates more propitious conditions for innovativeness and entrepreneurship; and better access to resources of productive factors, especially to capital (Nosiadek 1999).

The intensification of trade and capital flows stems from: elimination of the foreign exchange risk in trade and capital transactions between member countries; reduction in transaction costs (elimination of currency exchange cost): - increase in transparency of the goods, services and capital markets. As to the capital market of the member countries, the growth in capital flows is supposed to be accompanied by: disappearance of separation of the national markets and a general increase in the substitutability of different capital market segments, leading to an increase in the market "depth"; reduction and standardization of the interest rate; widening of the range of financial products being offered and, consequently, of the available investment opportunities.

The above-mentioned developments should enhance the growth in the rate of investment and, in the longer run, lead to faster economic growth (Nosiadek 1999). However, some possible adverse effects of a country membership in a monetary and economic union on the economic growth are known. The main one is the so-called asymmetric shocks. These are shocks that affect only one, single country and not the totality or, at least, majority of the union area.

Such shocks can not be absorbed by means of monetary or exchange rate policy; because in such circumstances the union authorities do not see any need to adjust their monetary and exchange rate policy. Meanwhile, the member country in question has already been deprived of these economic policy tools, having renounced them at the moment of accession to the monetary union.

As a rule, the given country's possibilities to counteract such shocks by means of fiscal policy are meagre too, since, in the monetary union this policy's autonomy is subject to greater or lesser restrictions. So, as the asymmetric shocks can not be neutralized by the macroeconomic policy, the whole burden of adjustment is shifted onto the microeconomic sphere. And, if the prices and wages are not highly elastic, especially "downwards" and the productive factors, inclusive of, especially, labour, not highly mobile, a decline in production and a growth in unemployment become inevitable. Thus, a monetary union member country suffering of frequent or strong asymmetric shocks can be threatened with long-lasting stagnation or even recession. Another source of threat to the economic growth in a monetary union member country can be the low international competitiveness of its economy. In such circumstances, renunciation of sovereign monetary and exchange rate policy can prove utterly unfavourable. The most frequent causes of low competitiveness can be the shortcomings in the restructuring of enterprises prior to the monetary union accession or the conversion of the domestic currency to the single union currency at a markedly overvalued exchange rate of the former. The economic literature devotes

much place to the analysis of factors crucial for the balance of advantages and losses from the establishment of the monetary union, especially for long-term economic growth in the member countries. The Optimum Currency Area (OCA) theory lays down the so-called real criteria of the monetary union convergence, i.e. of the monetary union establishment in a given area. There are, however, various interpretations of this theory. Mundell (1961) and McKinnon (1963), considered to be the authors of the OCA theory, concentrated exclusively on criteria regarding the effectiveness of the adjustment processes automatically activated in the economy following an asymmetric shock, whereas the origin of asymmetric shocks was completely left beyond these authors' concern (Borowski 2000). In its original formulation, to meet the optimum currency area criteria, the given area must show a high mobility of all the productive factors (especially the labour) and a high elasticity of prices and wages (especially "downward" elasticity). Meeting these conditions will secure an automatic and relatively quick return to original equilibrium in a country affected by an asymmetric shock.

However over time, the theory of optimum currency area began to be interpreted more broadly than was the case with its originators. While it might be difficult to indicate whether the contribution of new OCA criteria consider them as supplement to or substitute for the original criteria, the remark by earlier contributors could be explored. McKinnon (1963) expanded the theory to the ratio of tradable to non-tradable goods. He summarized that the greater ratio of tradable to non-tradable goods of a country, the less appropriate would be for this country to have flexible exchange

rate. This argument led people to believe that if trade flow between countries increase to a very high level, it would be proper for them to form a kind of currency area. Kenen (1969) went further to prove that the more diverse the export product mix of a country is, the less it is likely to need exchange rate adjustment as an important policy tool. He opined that in the case of external asymmetric shocks their neutralization was much easier if the country affected by such a shock showed a highly diversified production and (especially) export structure. In the 1970s, the theory evolved to the argument of Phillips-Curve in the implication of whether countries need respective monetary policy to maintain full employment, if they form a monetary union. Whether a country needs to collect seigniorage revenue was also discussed by economists in this period [(De Grauwe (1997), Eichengreen, (1993), Hefeker, (1997) and *Mongelli, (2002)*].

Further broadening of the OCA theory leaned towards identifying conditions that would eliminate the sources of asymmetric shocks. In the first place, internal shocks were dealt with. Gross and Thyssen (1998) drew attention to the importance of convergence of business cycles in the countries making up the monetary union, Whereas in the case of external asymmetric shocks, the probability of their occurrence was supposed to be considerably reduced if in the countries constituting the monetary union a similar production and export structure existed (Borowski 2000). The broadest "real convergence" concept assumes a marked reduction in income span between the member countries of the monetary union (Borowski 2000). In general, however, the latter interpretation is considered excessively rigorous. This finding

enhanced the conventional belief that free trade among countries is the pre-condition for an optimum currency area.

However, with the launch of European Monetary System (EMS) and later the Economic and Monetary Union (EMU), more arguments have been put on the cost and benefit analysis of monetary union. For the proponents, the benefits to form a currency area or monetary union range from reducing transaction cost, enhancing the efficiency of resources allocation and reducing the possibility of high inflation to less need to hold huge foreign exchange reserve and gaining more political power in international society with close unity. Recent empirical study attempted an index to examine countries that potentially can form an optimum currency area. For Example, Eichengreen and Bayoumi (1996) developed an index, which takes into account export structure, bilateral trade intensity and countries size to examine Asian Countries and found only a few counties fit to the condition that could form a currency area.

The OCA theory occupies a central place in the discussion considering countries' choices of monetary union. The theory puts an emphasis on the structural characteristics of these countries, which in turn determine the optimality of their exchange rate regime choice. Thus, the theory establishes certain criteria according to which a country is more or less fitful for a fixed or a flexible exchange rate regime choice. In this part of our study we will discuss these criteria putting an emphasis on their relevance for the WAMZ countries.

The OCA theory comes into light in 1963 following a seminal article by Robert Mundell (1961). The author defines a currency area as a "domain within which exchange

rates are fixed". According to Mundell two countries are interested in establishing a currency area if there is a high level of factor mobility (capital and labour) between them. His reasoning is based on the necessity to adjust to asymmetric shocks. Thus, his model consists of two countries (A and B) each of which produces a single good and the shock in question is a shift of demand from the one country's good to the other country's good. The major assumption of this model is that prices and wages in the two countries are sticky and that the two countries are adverse to unemployment (more precisely this concerns country A whose good suffers from a sudden lower demand, i.e. the country hit by the negative shock) and inflation (which tends to accelerate in country B who enjoys the sudden higher demand of its good 4). If the countries hit by the asymmetric shock are tied by a flexible exchange rate, the adjustment is done by depreciating the currency of country A and appreciating the currency of country B. Thus "depreciation can take place of unemployment ... and appreciation can replace inflation". If the countries in question are tied by a fixed exchange rate and under the above hypotheses the adjustment to any asymmetric shock becomes more problematic. The level of employment in the economy hit by the negative shock (A) could be maintained only if country B accepts higher inflation. Thus, the opportunity cost of guarding the level of employment in country A will be an acceleration of the inflation in country B and the opportunity cost of guarding stable prices in country B will be the rise in the unemployment rates of country A. If, however, the mobility of the factors of

production between the countries is high, this problem can be avoided: the potential excessive workforce and capital will flow into the country whose good benefits from the higher demand, thus reducing unemployment risk in country A and inflation risk in country B. So, according to Mundell "if factors are mobile across national boundaries then a flexible exchange system becomes unnecessary, and may even be positively harmful...". The use of this theoretical reminder is that it helps us spot the main problem the inevitable existence of asymmetric shocks which could hinder countries on their way to forming a monetary union. The more the countries are exposed to asymmetric shocks, the less the utility of adopting fixed exchange rate regimes. The existence of these shocks compromises the exchange rate stability between countries. Consequently, we can expect a positive relationship between the magnitude and the frequency of these shocks on one side, and the volatility of the exchange rate on the other.

Although inevitable, the problem with the existence of asymmetric shocks should not be considered as intractable. The adjustment to such shocks can be achieved through movements in the prices of goods, services and wages. This implies a high degree of price and wage flexibility; otherwise the adjustment will need reductions in the employment and production levels of the adversely hit economies. In the most optimistic of cases prices in the WAMZ countries can indeed be considered as flexible, but nominal wages are notably sticky downward. The relationship between wage levels and employment is essentially weak. This means that Mundell's hypothesis of wage and price

stickiness fits well to the WAMZ countries' reality.

Another solution to asymmetric shocks is, as already discussed, the existence of factor mobility among the concerned countries. We need, however, to distinguish capital mobility from labour mobility. Restrictions on capital mobility, irrespective of the ongoing financial sector reforms, are still heavily prevailing in the WAMZ countries. Similarly the mobility of workers between the WAMZ countries is highly constrained, although there is free movement of citizens across the zone in line with the ECOWAS protocol, employment is prohibited.

The existence of coordinated monetary, fiscal and wage policies among the countries desiring to constitute an OCA can play an important role for the restoration of the economic equilibrium in the countries hit by asymmetric shocks. This makes necessary, for example, the establishment of a redistribution system of purchasing power among the concerned countries.

However, the possibility of budgetary transfers is quite limited at present even within the Zone. Moreover, the need to accept common final objectives (such as price stability, employment levels and growth) becomes evident. We can go a step further and note that such coordination is important even when the shocks that hit countries are symmetric. It is necessary that the response to such shocks be harmonised (e.g. in the sphere of wage indexation). However, this is not the case even within the EMU itself, which does not mean that the argument for such cooperation in the future becomes less relevant.

McKinnon (1963) proposed other criteria for an exchange rate regime choice. These are the

degree of openness and the size of the country as factors facilitating its integration within a monetary union. He opined that the creation of more and more currencies in the world diminishes the utility of any given national currency as a unit of account and medium of exchange. He suggested that for a small country, the utility of its own national currency increases if linked with the other currencies through a fixed exchange rate system. The country's size is supposed to be negatively related to its degree of openness. We can expect then that the smaller the country, the more stable the respective exchange rate. In turn, the more the country is open to trade, the greater is its interest of adopting a fixed exchange rate regime. The degree of openness of the WAMZ countries has progressed moderately since the beginning of the reforms in the late 1980s and early 1990s.

Kenen (1969) puts emphasis on the diversity of the productive structure of the country willing to join a currency area. According to him, asymmetrical shocks do not affect the whole industrial tissue of a country but rather one or more particular sectors of the economy. Thus, the more the production structure of a given country is diversified, the smaller will be the repercussions of the shock on the economy of the country as a whole. Unfortunately, the lack of high frequency data on the composition of GDP in WAMZ countries makes the estimation of this criterion difficult. Furthermore adequate comparable data for the composition of exports among the WAMZ countries, which is as a good approximation of production diversification, is scanty. Nevertheless, it should be noted that the problem of

diverse production in the WAMZ countries is much less acute than the problem with the quality of their products.

A stable and developed financial system facilitates the absorption of asymmetric shocks by the country with a fixed exchange rate system and thus limits the pressures on the exchange rate stability. This means that countries willing to join a monetary union need to have functioning banking systems and capital markets. Several WAMZ countries have experienced profound banking system crises during the reforms years. The banking system problems of the WAMZ economies, like in other developing countries, were in part predetermined by the lack of experience and prudential regulations at the beginning of the nineties. Regarding the capital markets and the use of diverse financial instruments, though existing in some countries of the zone, they are not as developed. The economic literature offers a few measures of financial development. The most frequently used measure is the one that estimates the ratio of a large monetary aggregate to the GDP of the respective country.

It is pertinent to note that some authors, including Frankel and Rose (1996) contest the exogeneity of the criteria discussed above. They consider that countries that do not comply with these criteria *ex ante* can manage to do so *ex post*, once the currency zone is established. Thus, they show that the very existence of the currency area encourages factor mobility and trade. These, of course, are very pertinent considerations that can justify a political decision for countries to form a monetary union even where the OCA criteria are not satisfied beforehand.

Second, the traditional OCA literature was interested primarily in the structural characteristics of the countries willing to form a currency area. More recent developments add other considerations relative to the choice of exchange rate regime. These developments consider, for example, the search of exchange rate regime credibility and the adverse effects of an uncertain and an incredible policy on the stability of the exchange rate.

Some empirical studies suggest that a monetary union confers substantial benefits to trade. Rose (1999), in a cross-sectional study, shows that two countries that share the same currency trade three times as much as they would with different currencies. Glick and Rose (2001), in a time-series cross-sectional study, find that bilateral trade rises/falls by about 100% as a pair of countries forms/dissolves a currency union, *ceteris paribus*. Frankel and Rose (2000) use economic and geographic data to show that belonging to a currency union more than triples trade with each of the members of the zone. They also find that every 1.0 percent increase in trade (relative to GDP) raises income per capita by roughly 1/3rd of a percent over twenty years. Hence, their results support the hypothesis that the beneficial effects of currency unions on economic performance come through the promotion of trade, rather than through a commitment to non-inflationary monetary policy, or other macroeconomic influence. Rose and Engel (2002) find that members of international currency unions tend to experience more trade and less volatile exchange rates.

The empirical literature also investigates the relationship

between business cycles synchronization and currency unions. Rose and Engel (2002) also find that business cycles are more tightly synchronized for members of a currency union than between countries with sovereign currencies, but not as much as regions of a single country. Being a member of a common currency area increases international business cycle correlation by perhaps 0.1, an economically significant amount.

Frankel and Rose (1996, 1997) argue that international trade patterns and international business cycle correlations are endogenous. Using 30 years of data for 20 industrialized countries, they find that countries with closer trade links tend to have more tightly correlated business cycles. It follows that countries are more likely to satisfy the criteria for entry into a currency union after taking steps toward economic integration than before (Lucas critique). On the other side of the debate, Corden (1972) shows that differences in preferences across countries could obstruct monetary union. Bayoumi and Eichengreen (1994) enlist some caveats about implications of loss of policymaking in case of formation of a monetary union.

The cost of joining a monetary union has also been identified. First, the loss of power to affect a national money supply is legitimately feared, since, in an integrated market, all member countries will jointly control their monetary policy. Typically, the loss of a country's ability to use the exchange rate and monetary policy for stabilization was considered to be the most important cost of joining a currency area. However, this is surely not the case for small open economies, because it is

impossible to maintain free capital mobility and an independent monetary policy together. Such countries link their currencies to their main trading partners in order to gain higher exchange rate stability. This lowers the independence of monetary policy. The argument about the loss of monetary and exchange rate policy was especially emphasized in the early 1970s when lots of authors believed in a negatively sloped Phillip's curve. In that case, the common currency could imply that a country with a higher unemployment rate, relative to other members of the currency area, would no longer have the option of using a monetary policy. As a result, the country would not achieve the desired mix of inflation and unemployment. However, recent empirical studies, including (WAMI, 2005; Onwioduokit, 2006) have shown that inflation and unemployment does not necessarily follow the Phillip's hypothesis.

Second, there are concerns about fiscal policy. It is not clear what the implications of membership in the currency area are for an independent fiscal policy. It is likely that even in the complete monetary union countries keep their fiscal policies independent; however some centralization of fiscal policies could serve as one of the mechanisms in adjusting to the asymmetric shock. On the other hand, the centralization of budgets often leads to an increase in spending.

Third, is the loss of Seignorage. Seignorage is the revenue the government obtains by financing its budget deficit through printing money rather than selling debt instruments. That is why at full employment printing money would lead to inflation. Seignorage is frequently also called the 'inflation tax'. It is largely a policy question how

Seignorage would be distributed in the case of monetary union. However, inflation tax has since been identified as a sub-optimal means of financing development as it hinders growth in the medium to long term.

Fourth, in an uncertain world risk-averse households and firms would gain welfare (after the elimination of adjustment costs) if one of the sources of uncertainty in exchange rates were eliminated. This argument implicitly assumes that exchange rates volatility has a negative effect on economic calculation. If the exchange rate reflects the movements in fundamentals, then volatility does not matter. On the other hand, if the movements of exchange rates reflect feelings, speculation etc., then high volatility could lead to misallocation of resources. But the decrease in the uncertainty of the evolution of exchange rates lowers the expected profit of investment, which could subsequently influence output; therefore the theoretical outcome is ambiguous.

Fifth, the elimination of exchanging one currency for another is the most visible benefit of monetary union. It is only an empirical question how much the economic agents gain in the long run (after the adjustment of all agents to the new environment). However, there are also indirect benefits from the elimination of the national currencies, such as a decrease in price discrimination.

The argument against attaining OCA ex post in the pursuit of the monetary union in the WAMZ was the major motivation for the adoption of a set of convergence criteria that each country is expected to attain before acceding to the monetary union. The four pillars adopted as benchmarks in the WAMZ

increasing number of financial institutions dedicated, among other areas, to housing and the provision of loans to borrower groups lacking guarantees and collateral. The government securities market has grown very markedly. There is also considerable scope regarding the provision of housing finance as well as considerable pent-up investment opportunities from public institutional investors.

In the context of a monetary union, the common currency and the associated money market play a very important role as catalysts for financial integration. An integrated inter-bank market, as exemplified by the experience in the EU, can ensure an even distribution of liquidity and a homogenous level of short-term interest rates across the union (Papademos, 2005)).

The interbank market in the WAMZ's countries are however, thin and activity is limited to intra-group transactions. Interbank transactions was around 8.2 percent of domestic credit on the average in the Zone in 2006. Obstacles to the development of the interbank market include the absence of adequate legal framework, appropriate collateral (as most transactions are not collateralized), a network to match supply and demand, and a counterparty risk assessment framework. The excess liquidity in the banking system may also be an impediment to further interbank transactions

A well functioning payment system is a key determinant of integrated money markets and progress on this front is lacking in the WAMZ. The conduct of monetary policy in the Union will have to be adapted as financial markets become more integrated. In most WAMZ countries, reserve requirements

have been used extensively as other sterilization instruments have proved to be less effective in a context of excess liquidity and thin interbank money markets. These reserve requirements are, however, differentiated as they differ by country, indicating that there is scope for further financial integration. The treasury bills market has been growing rapidly in recent years. Total issuance has grown from about 23.1 per cent of GDP 2002 to about 27.9 per cent in 2005. Maturities have ranged from 3 to 12 months, with most issuance at 6 months. Interest rates, which are payable in advance, have been in the 7.519.5 percent range depending on the issuer and the maturity of the issue.

Cross-border transactions in the treasury bills market are non existent. Furthermore, in most countries until very recently, treasury bills were mostly subscribed to by the commercial banks. A number of factors can explain this development. In a situation of excess liquidity, banks can find a better remuneration for their funds at relatively short maturities. In addition, interest earned on the treasury bills is tax exempt in some countries and carries a zero weight risk in the calculation of the capital adequacy ratio. Similarly, in some countries' regulation allows insurance companies to use treasury bills to cover their obligations. There is no regional capital market and in the countries where capital markets is operational (Nigeria and Ghana) there are no provision for the cross listing of shares. Market capitalization for the two existing stock exchanges (Ghana and Nigeria) in the zone was less than 20.0 percent of GDP in 2005.

Harmonization of access, rules is useful in assessing financial integration. Thus, a given set of

financial instruments and/or services can be considered as being fully integrated if all potential market participants with the same relevant characteristics: have equal access to a set of financial instruments and/or services; face a single set of rules when they decide to deal with those financial instruments and/or services; are treated equally when they are active in the market (Baele et al. (2004)). These are obviously lacking in the WAMZ.

A number of initiatives have been undertaken to promote regional financial integration in the WAMZ zone. WAMI is currently working towards the removal of cross-border restrictions on banking and other financial services including insurance. One of the key objectives of the WAMZ current programme is to create a common economic space in the Zone so that any financial institution incorporated in any of the countries of the zone will be deemed to have been incorporated in all other countries of the Zone and will be able to carry out its legitimate activities without led or hindrance. In this direction, the Institute is currently working on a Single Economic Space legislation that will provide a level playing field for all the financial institutions, including the insurance companies in the Zone to expand their frontiers across the Zone.

4.0 Recent Economic Developments in the West African Monetary Zone and Progress towards Convergence

The Zone's macroeconomic indicators generally showed an improving trend in recent times. Modest growth was recorded, inflation moderated, the fiscal deficits narrowed and external sector viability improved. On a zonal basis, three convergence criteria (fiscal deficit/GDP

Table 1: WAMZ (Zone -Wide): Selected Macroeconomic Indicators

	2001	2002	2003	2004	Jun-05	2005	Jun-06	2006
	Act.	Act.	Act.	Act.	Act.	Act.	Prov.	Prj. *
Output and prices								
Real GDP growth (%)	5.3	4.8	8.8	6.3	-	6.4	-	6.9
Nominal GDP (\$mil)**	70,958.9	74,806.8	89,077.8	99,794.1	63,680.7	127,361.4	79,645.3	159,290.6
Inflation	15.15	11.59	22.12	11.53	19.56	13.40	11.16	9.98
Money and credit								
Money Supply (M2+) growth (% change)	15.7	16.0	16.0	18.7	20.4	17.9	28.4	23.2
Velocity (Nom. GDP/M2+)	5.4	4.9	5.0	4.7	5.0	5.1	4.9	5.2
External sector								
Oil bill (mil. USD)	9,755.7	10,207.3	13,789.1	13,564.8	7,342.4	15,877.7	8,997.1	18,264.0
Oil bill (% of Imports)	64.5	61.5	66.6	65.0	64.6	65.0	66.4	67.4
Gross International Reserves (\$mil)	11,130.5	8,542.2	9,158.8	19,020.0	22,534.0	30,528.4	38,590.6	45,854.0
Gross International Reserves (in months of import)	8.8	6.2	5.3	10.9	11.9	15.0	17.1	20.3
Governments Fiscal operations								
Tax Revenue (% of GDP)	14.7	10.7	12.1	15.2	15.0	17.1	15.1	16.2
Salary mass/Total tax revenue	15.0	24.2	15.1	12.2	12.8	10.2	12.3	11.6
Public Investments from domestic receipts	63.5	69.5	48.4	28.4	26.6	38.2	3.1	33.7
Capital Expenditures / Total Expenditures	30.0	31.2	23.7	14.7	14.7	19.4	2.8	16.5
Expenditure (% of GDP)	34.4	25.9	27.6	34.0	30.6	37.2	30.8	35.3
Fiscal Balance includ. Grants (% of GDP)	-3.5	-4.1	-2.2	-1.3	-0.1	-1.1	1.3	-1.3
Fiscal Balance excl.Grants (% of GDP)	-4.2	-4.5	-2.8	-2.0	-0.5	-1.5	0.7	-1.9

Source: WAMZ Authorities and WAMI Staff

(*) Projection by WAMI Staff. (**) In order to avoid distortion caused by exchange rate problem, WAMZ Real GDP was not computed.

However, in future assessment Purchasing Power Parity methodology will be adopted.

The Zone has sustained its performance on the convergence scale by consistently meeting three of the four primary convergence criteria since 2001, except in 2003, when only two criteria were satisfied. Projections for end year 2006 indicate that the four primary criteria will be satisfied at the zonal level, the first time since the inception of the WAMZ project. Detailed developments in the sectors are provided below.

Fiscal Sector Developments

Fiscal developments during the first half of 2006 were generally satisfactory. The indicative zonal overall fiscal balance including grants was estimated at a surplus of 1.3 percent of GDP. Excluding grants, the fiscal surplus narrowed to 0.7 percent of GDP. From the commencement of the WAMZ convergence programme in 2001 to June 2006, the overall zone-wide deficit has continued to narrow towards the policy target. Although the overall picture for the zone was impressive, it concealed significant differences in individual member country performances. *Nigeria*, the largest economy in the zone, was largely responsible for the outcome of improved fiscal balance excluding grants, due largely, to the positive developments in both its tax and non-tax revenue. *Guinea* also

recorded impressive fiscal consolidation in the last two years 2005 and 2006.

Major effort is, however, needed in The Gambia, Ghana and Sierra Leone whose fiscal deficit positions were significantly outside the threshold of the WAMZ convergence requirement. The countries that have consistently failed to be compliant are those with high dependence on donor inflows since the criterion is defined to exclude grants but include grant-financed expenditure. Although The Gambia and Ghana had run fiscal deficits above the WAMZ target since the commencement of the convergence programme in 2001, they have also registered significant primary surpluses, during most of the period.

Monetary Policy Developments

At the end of 2006 zonal broad money is projected to grow by

23.2 percent, a moderate acceleration from the 20.4 percent recorded at the end of 2005. Narrow money, which accounted for 52.3 percent of total zonal money supply, grew by 21.7 percent, whilst quasi money including foreign currency deposits rose by 36.8 percent. The growth rate of broad money was principally attributed to an increase in the net foreign assets of the banking system induced by a large injection of liquidity from both official and private inflows. To slow down the rising trend in broad money growth, most central banks intensified liquidity management with various instruments including Open Market Operation (OMO) with government and central bank securities, adjustments to the required reserve ratio, special foreign exchange sales and moral suasion. On yearly basis, credit to the private sector at the end of

June 2006 grew by 12.3 percent relative to 11.0 percent at the end of December 2005 and 29.8 percent at the end of 2004. A possible explanation of this development is the risk-averse attitude of Deposit Money Banks' (DMBs) due mainly to weaknesses in institutions which do not guarantee enforcement of agreements. This also explains the 51.2 per cent growth in net claims on government by the banking system during the first half of the year and 155.4 percent in 2005.

A general decline was recorded in interest rates (lending/deposit) in all the countries reflecting the disinflation process, except Guinea where inflationary pressures escalated, whilst real interest rates remained significantly negative. The discount rate on the 91-day Treasury Bills ranged from 8.5 per cent in Nigeria to 22.5 percent in Guinea, with Ghana, The Gambia, and Sierra Leone at 9.75, 10.5 and 13.8 percent, respectively in June 2006. Average savings-deposits rates have remained very low compared to the inflation rate, resulting in low savings mobilisation. Thus commercial banks' interest rate spread remained in double digits throughout the zone, indicating lack of competitiveness and structural weaknesses.

External Sector Developments

The WAMZ external sector showed significant improvement, driven mainly by the positive developments in world commodity prices as well as successful debt relief arrangements concluded by some member countries in the recent past and the implementation of appropriate fiscal and monetary policy mix. Zone-wide average gross official

reserves in terms of imports cover is projected to increase from 15.0 months recorded in 2005 to 20.6 months by the end of 2006. All Member States, with the exception of Guinea held reserves of at least three (3) months imports cover. Reflecting the resource endowment within the Zone, Nigeria with huge oil reserves coupled with the positive price shock in the world market witnessed significant build up in reserves during the period, whilst other countries despite the surge in their import bills achieved modest increase due to favourable developments in commodity prices and donor support. *Nigeria* achieved 23.0 months of import cover by September 2006 and is projected to reach (26-28) months of import cover by end-December. The increase is attributed largely to the decision of the authorities to exercise fiscal restraint in the face of positive shock in international oil prices. Furthermore, sustained efforts at implementing the country's reforms under the Policy Support Instrument (PSI) monitored by the IMF, enabled *Nigeria* to reach agreement with its creditors, culminating in the complete liquidation of its debt owed to the Paris Club.

Ghana achieved 3.6 months of import cover through the sustained implementation of sound macroeconomic policy and structural reforms during the past three years which greatly restored confidence in the economy. In addition, expanding export receipts from positive terms of trade for cocoa and gold and increases in donor support, in particular, debt relief under the enhanced Highly Indebted Poor Countries (HIPC) Initiative, contributed to enhance the external viability of the Ghanaian economy. In *The Gambia* a surge in private remittances coupled

with foreign direct investments inflows, particularly in the tourism; banking and construction sectors were largely responsible for the build-up in international reserves during the period. In *Sierra Leone*, there was an improvement in the gross official reserves build up attributed to increase in exports of minerals; diamond, bauxite, and rutile. The increase in donor support in recent years has also contributed significantly to the improved external position of the country. *Guinea* has consistently recorded gross foreign exchange reserves levels below the minimum requirements since 2003, mainly as a result of severe constraints in the external sector and macroeconomic instability.

During the first half of the year, exchange rates in the zone remained relatively stable with most of the currencies operating within the WAMZ ERM II. Countries have also adopted measures to help unify the exchange rates between the official and parallel markets and reduce the spread that existed in the foreign exchange market. *Nigeria's* adoption of the wholesale Dutch auction system and the liberalization of its current account enabled the authorities to eliminate the premium between the official foreign exchange market and the parallel market. During the reference period, three currencies (the dalasi, naira and cedi) operated within the WAMZ ERM II mechanism and traded close to their central parity rates. Specifically, The Gambian dalasi and Nigerian naira traded at 9.4 percent and 7.2 percent, respectively, below their central parity rates at the end of June 2006. The Leone traded at 16.2 percent above its central parity rate exceeding the WAMZ fluctuation band of 15.0 percent. *Guinea* fell out of the ERM II mechanism since July 2004 with

the Guinean franc trading at a significant deviation of 60.8 percent above the ERM II fluctuation band.

Real Sector Developments

Growth of real gross domestic product has been sustained; and has out-paced the average population growth rate (estimated at 3.0 per cent) in the Zone. The real GDP in the WAMZ grew by an average of 6.0 percent over the 2001-2005 periods. An analysis of the trends in the WAMZ economic growth, however, shows a pattern of sharp swings. From an estimated zone-wide growth rate of 5.3 percent in 2001, the rate dropped to 4.8 percent in 2002 before peaking at 8.8 percent in 2003. Subsequently, real GDP growth fell to 6.3 percent in 2004 and then rose slightly to 6.4 percent in 2005.

The mixed performance mirrored the trends in Nigeria's real GDP growth. Developments in the real sector in Nigeria, the largest economy, with a weight of about 90.0 percent in WAMZ output, were largely influenced by oil production which fluctuated over the reference period. The performance of the agricultural sector also had positive impact on real GDP growth across the WAMZ countries. Favourable weather conditions, especially, timely and adequate rainfall, and policies, including improved seedlings, financing, and availability of inputs such as fertilizers were responsible for the improved agricultural performance in the zone. Manufacturing was, however, generally less buoyant in most countries for reasons bordering on infrastructural constraints (electricity supply), low intra-trade transactions, economy of scale and inability to compete with the

developed and emerging markets.

Economic activity in the zone during the first half of 2006 remained impressive in spite of the hikes in domestic prices of petroleum products in most of the countries, in line with the rising price of crude oil on the international markets. Agricultural production showed strong growth in 2006 and is expected to be higher in member countries than the level in 2005. All crops staple, cash and tree crops recorded increases in output. The higher growth rate in 2006 is also due to higher value added from the mining and construction sub-sectors.

During the first half of 2006, there was an improvement in the real economic activities of *The Gambia*. The output growth was broad based as agriculture, industry and service sectors recorded substantial increase. Economic activity in *Ghana* was robust, evidenced by the Bank of Ghana's Composite Index of Economic Activity which posted an increase of 9.8 percent in real terms (year-on-year) above the trend growth of 8.8 percent. The upward trend in the index was driven by manufacturing sales, tourism, among others. In *Guinea*, output growth is projected to pick up significantly from a revised estimate of 3.3 percent in 2005, to a projected 5.0 percent in 2006, which represents a vast improvement, compared with the lackluster 1.2 percent recorded in 2003. The higher projected growth rate in 2006 is due to higher value added from all the sectors, but particularly, from mining, construction, public sector projects as well as in agricultural activity. The Guinean economy has a very strong

potential to grow faster if macroeconomic and socio-political stability is maintained. Gross Domestic Product in *Nigeria* grew by 6.5 per cent in real terms in 2005 compared to 6.6 per cent in 2004. The growth rate of the GDP in the first half of 2006 was estimated at 5.2 per cent. Given the resilience of the economy, it is likely the country would achieve a growth rate of 6-8 per cent by end-December 2006. This estimate is based on the expected growth in the non-oil sectors especially agriculture and services. Economic activity in *Sierra Leone* is strong. The real GDP growth is expected to reach 7.8% by the end of the year. Underpinning this optimism is the resumption of production and export of bauxite and rutile, as well as sustained agricultural expansion.

4.1 Progress towards Convergence The ultimate objective of the WAMZ project is to create a common economic space among the participating countries. The need to nurture strong and conducive macroeconomic environment, institutional framework, sound monetary policy, fiscal discipline, vibrant trade and financial markets are paramount for, the WAMZ to achieve the status of an optimum currency area. The zonal performance on the convergence scale showed modest improvement during the first half of 2006. Three criteria were sustained from 2004 to June 2006. Even though the inflation criterion was missed, there is evidence of a strong movement towards the WAMZ single digit benchmark. The detailed zonal performance on each of the four primary criteria is presented below:

Table 2: WAMZ-Status of Convergence

Primary Criteria	Target	2001	2002	2003	2004	2005 June	2005	2006 June	2006 ¹ Proj.
Inflation Rate (end period)	Single digit	15.15	11.59	22.12	11.53	19.56	13.40	11.16	9.98
Fiscal Deficit /GDP (%) excl. grants	? 4%	4.2	4.5	2.8	2.0	0.5	1.5	-0.7	1.9
Central Bank Financing of fiscal deficit as % of previous year's tax revenue	<10%	0.0	0.0	30.6	0.0	0.0	0.0	0.0	0.0
Gross External Reserves (Months of Imports)	? 3	8.8	6.2	5.3	10.9	11.9	15.0	17.1	20.3
Criteria(s) satisfied		3	3	2	3	3	3	3	4

Inflation

Analysis of inflationary trend in the WAMZ indicates that the weighted average inflation rate in the Zone ranged between 22.1 per cent in 2003 and 11.2 per cent in June 2006. Throughout the convergence period (2001-June 2006), zonal averages were consistently above single digit. The weighted average inflation rate for the zone decelerated from 15.2 per cent in 2001 to 11.6 in 2002, but deteriorated markedly to 22.1 per cent in 2003. However, price stability has improved considerably to 11.2 per cent in June 2006.

Over the period 2001 to June 2006, the zonal inflation can be explained by a variety of common factors. First, it reflects a number of important policy choices, most notably, the decline in fiscal dominance and the orientation of monetary policy towards price stability. Second, in many member states, the impact of stable exchange rate helped to dampen inflation. It is germane to note that rising international crude oil prices beginning 2003 followed by the deregulation of petroleum product pricing mechanism was a major factor that exacerbated the inflationary pressures in the WAMZ. Overall, commitment of member states to the WAMZ project has contributed positively in underscoring the significance of price stability in the Zone. Among the 5 major regional economic communities in Africa, the WAMZ

ranked 4th in terms of inflation performance in 2005 having recorded an inflation rate of 13.5 per cent, compared to Africa average of 7.7. However, WAMZ inflation performance has further improved to 11.2 percent in 2006.

Focusing on the performance of individual countries, over the six-month reference period ending June 2006, three member states (*The Gambia, Nigeria and Sierra Leone*) had inflation rates that were within the convergence target. The inflation rate in Ghana was 10.5 per cent, considerably lower than in previous years, but still marginally above the single digit. Guinea's inflation rate accelerated from 29.7 in December 2005 to 35.5 per cent in June 2006, a whopping 25.6 percentage points above the reference value and 34.0 per cent higher than the best performing country (*The Gambia*). The depreciation of the Guinean franc, and its pass-through effect, accounted for the inflationary spiral. Looking forward, there is a strong indication that inflationary pressures will ease in the WAMZ. The combined effect of narrowing fiscal deficit and pursuit of less accommodating monetary policy will likely produce the desired result. The rate of inflation is generally forecast to moderate and remain within the single digit threshold in the near term.

Budget Deficit (Excluding Grants) as a Ratio of GDP

The zonal performance on the

fiscal deficit excluding grants, as a ratio of GDP, has substantially improved over the years. The outcome was broadly within targets throughout the convergence period, with the exception of 2001 and 2002, when the target of 4.0 percent was narrowly missed. The projected WAMZ budget deficit/GDP ratio for end-December 2006 is estimated at 2.0 per cent. The positive outcome was largely driven by Nigeria's performance. However, the downward trend registered by the other countries reflected efforts at fiscal consolidation. Year end projections indicate that *The Gambia, Ghana and Sierra Leone* are not likely to satisfy this criterion. As at June 2006, only *Nigeria and Guinea* met this criterion. Indeed, the performance of Ghana deteriorated significantly relative to December 2005 owing to exceptional expenditure on MDGs, whilst that of *The Gambia and Sierra Leone* showed improving trend as at June 2006.

Overall, progress in reducing fiscal deficit has generally gathered momentum. However, in a number of member states (*The Gambia, Ghana and Sierra Leone*), where grants play a major role in revenue composition, the likelihood of attaining and sustaining this criterion within the convergence period (2006 -2009) is doubtful. Notwithstanding the zonal achievements, a broader view on the sustainability of fiscal developments shows that

sustained narrowing of the fiscal space over an extended period of time on account of the substantial fiscal surplus in Nigeria is highly probable.

Central Bank Financing of Budget Deficit

The criterion calls for the financing of government deficits by the WAMZ central banks to be restricted to 10.0 per cent of previous year's tax revenue. The Zonal performance on this criterion has been generally satisfactory as the requirement has been satisfied in all the years with the exception of 2003. The zero financing culture has generally gained roots in the zone. The end 2006 projections indicate that all the member countries are likely to satisfy this criterion. It is envisaged that with the establishment of the WACB which shall be imbued with sufficient autonomy, adherence to this criterion shall be firmly entrenched.

Gross Reserves in Months of Import

The external reserve in months of import cover criterion has been constantly met and exceeded by the zone throughout the convergence period (2001-June 2006). As at June 2006 the level of external reserves in the Zone could finance 17.1 months. This is substantially above the three months specified under the criterion. However, as in the other criteria, the influence of Nigeria's performance in the zonal outcome was overwhelming. The country level performance showed that *Nigeria* consistently satisfied the criterion, from an outturn of 11.3 months in 2001 to 23.0 months as at June 2006. The projection for the end year is 27.5 months. An impressive record was also registered by *The Gambia*, where the criterion was only missed in 2002. *Ghana* and *Sierra Leone* operated outside the threshold in two years only. *Ghana* in 2001 and

2002 had achieved 1.4 and 2.6 months of import cover, whilst *Sierra Leone* recorded 2.3 months in 2003. *Guinea* met the criterion consistently from 2001 to 2002 and thereafter, faltered to 2.0 and 2.3 months in 2005 and June 2006, respectively. The major factor that influenced the performance of this criterion was the price of crude oil in the international oil market. Whilst this development had positive impact on *Nigeria's* external reserves, all other countries in the WAMZ experienced negative shocks. However, positive price developments in other primary commodities including gold and cocoa moderated the impact of escalating crude oil prices. The adoption of flexible exchange rate regime by the national central banks in the Zone also contributed to the sustenance of balance of payments viability in the Zone. The proposed convertibility of WAMZ member country currencies will also enhance the WAMZ Balance of Payments.

5.0 Challenges, Recommendations and Concluding Remarks

5.1 Challenges

Challenges faced by the WAMZ include; adoption of appropriate policy measures to achieve and sustain macroeconomic convergence, sensitization of the populace to buy into the project, development of efficient payment system, contribution to the financial obligations of various WAMZ projects, free movement of factor of production among the zone and sustenance of Political will to pull through the single monetary zone project.

The immediate challenge for the zone is for those countries (The

Gambia and *Nigeria*) that satisfied the four primary convergence criteria to sustain their performance, while the remaining three countries redouble their resolves to comply.

The resolve by all member states to ensure fiscal discipline is crucial. Empirical studies have shown that of the four primary criteria, the financing of government deficit by the central bank is most detrimental since this directly affects the level of inflation and the fiscal deficit/GDP ratio.

Political commitment must also take cognizance of the need for integration projects to command priority in national policies, as the objectives of the WAMZ Programme are often not integrated into national development plans while some agreements take too long to ratify. The strengthening of institutional capacities at the national level for effective linkage with the regional institutions is paramount for the success of the WAMZ project.

5.2 Recommendations

Political commitment must take cognizance of the need for integration projects to command priority in national policies, as the objectives of the WAMZ Programme are often not integrated into national development plans whilst some agreements take too long to ratify. Short term national goals should as a necessity be sacrificed for long term higher sub-regional integration objectives. The strengthening of institutional capacities at the national level for effective linkage with the regional apparatus and reinforcing national integration structures for better coordination among member states is another important issue. Beyond carefully managing macroeconomic policies, it will also be crucial at this juncture to

maintain the momentum for structural reforms which aim at raising the growth potential of individual WAMZ economies.

There is need for continued resolve by the relevant authorities in the prevention and effective management of crises. Such leadership would have to guard against widespread corruption in the public and other sectors to allow for proper utilization of the resource endowments for conflict prevention and human development. Peace, once attained has to be consolidated quickly to minimize the high risk of a return to political and civil unrest. Other measures that will reduce these risks and facilitate national reconstruction and the attainment of the WAMZ integration objectives entail nurturing of the agencies of restraint and key institutions and processes for conflict management, civil society, the judiciary and the issue of governance.

Another aspect of political commitment is the need for countries to ensure prompt settlement of financial obligations to the WAMZ monetary union programme and implementation of stable and sound macroeconomic policies. To this end, taking a more proactive view of the Stabilization and Cooperation Fund is urgently needed. Currently, the Operationalisation of the Fund has been stalled by inadequate financial contributions by member countries. Urgent steps should be taken by countries with outstanding obligations to the Fund and other programmes. Only one country, The Gambia, has completely discharged its financial obligations to the capital of the WACB.

The WAMZ economies still require substantial fiscal reforms, made even more pressing by the fact that they tend to rely heavily on trade-related revenues that will likely decline with anticipated tariff reductions. Their public financing also relies heavily on grants, which, together with the low level of private sector development, continues to pose fiscal challenges. The prospects for fiscal sustainability remain fragile while high debt burdens persist.

Fiscal consolidation assists long-term growth since countries with low deficit and debt levels can exercise more options over expenditure priorities, and allocate more resources to productive sectors. However, fiscal tightening may cause output to contract in the short term. European experience during the 1990s, however, suggests fiscal consolidation when there is a large fiscal imbalance and a high level of government debt can lead to higher output growth even in the short run. This is because deficit and debt reduction can lead to lower interest rates and increased private sector confidence, thereby boosting private investment and consumption. Thus, countries suffering from persistent fiscal deficits and high debt may benefit from fiscal consolidation both in the short and long term.

There is no easy way to carry out fiscal consolidation to eliminate fiscal deficits and debt. Several ways are at hand to finance the fiscal deficit, including higher taxation, cutting spending, domestic borrowing, external borrowing, and external assistance, selling public assets, or printing money. Each one faces constraints and carries risks. Heavy domestic borrowing can raise real interest rates, reduce the credit available to the private

sector, and crowd out private investment. If real interest rates exceed the real growth of public revenues, domestic debt growth can become explosive. Furthermore, domestic financial markets in the WAMZ countries are not developed enough to provide the necessary financing. While external borrowing eases the short-term constraints on capital, increasing foreign indebtedness may result in balance-of-payments or currency problems. Although fiscal deficits can be financed by external grants and aid, these sources are not always forthcoming or reliable. Selling public assets is also an unsustainable source of financing. Monetizing fiscal deficits causes inflation and curbs private consumption. When inflation becomes very high, revenues from an inflation tax can fall because of reduced economic activity. Inflationary financing can also create uncertainties, distort prices, and lead to economic inefficiency.

The difficulties associated with financing fiscal deficits provide a strong case for countries to implement prudent fiscal policies. They also indicate that sustainable fiscal consolidation is best achieved through increasing revenues, improving revenue collection, and reducing spending. However, financing through increased taxes and spending cuts has its own problems, and needs to contend with administrative difficulties, economic cost, and political resistance. Despite these difficulties, WAMZ countries with persistent deficits and high debt-to-GDP ratios may need to seriously consider measures to increase revenues and cut spending to bring about sustained improvements in their fiscal positions.

As indicated earlier, financial

integration in the WAMZ has not made adequate progress in some aspects. In particular, the zonal government securities markets is non-existent, thus there are very limited cross-border transactions, indeed, where there exist; the transaction is carried out through a third party that are usually outside the zone. Furthermore, a high degree of harmonization of rules has not been achieved clearly due to the non existent of common institutions.

In order to maintain and increase the efficiency gains from financial integration, it is important to identify the barriers and bottlenecks to financial integration in the WAMZ. A number of factors may explain why the significant progress on harmonizing rules has not been achieved. These include; excess liquidity and its distribution in the system are obstacles to a monetary policy; financial depth in the WAMZ is still low when compared with non-SSA developing countries as access to banking services remains limited; Most bank lending goes to a limited number of large borrowers in very few sectors. Given the economic structure of individual countries, the supply of investment opportunities is rather limited; official intra-regional trade is low and the accompanying demand for cross-border financial services has not materialized; while the zonal banking system remains fragile.

Against this background, policy makers could take the following steps to further financial integration; reduce the excess liquidity in the system and in so doing assess whether the current limitations on the use of indirect monetary policy instruments are driven by cost considerations;

similarly, reduce restrictions on the recycling of excess liquidity by, for instance, developing the zonal interbank market; accelerate macroeconomic convergence; work towards common rules, taxes, and regulations and especially their applications.

In the years leading to 2009 one of the major challenges facing the WAMZ countries is the adoption of cross convertibility of domestic currencies. The Institute has commenced work on this front. It is expected that the private sector will take the lead while the government will ensure that an enabling environment is created. All forms of encumbrances must be eliminated to ease financial transactions in the zone. It is envisaged within this arrangement that all the currencies of the zone would be quoted and trade in all the member countries. Preliminary studies have indicated that informal sector has actually gone ahead in the implementation of this aspect of integration. The least the officialdom can do is to support the arrangement through abrogation of laws and administrative directives that go against the spirit and letter of this arrangement. Thus the key challenge is for the formal sector to catch up with the emerging trend.

Overall, the single monetary zone and common currency would be beneficial to the economies of the countries in the second monetary zone as it will enhance the eventual creation of a single market in the ECOWAS, with a population of over 220 million people and a geographical span of 6,295,000 square kilometers. The single currency will eliminate

currency trafficking along in the sub-region. It would also allow prices to be denominated in common units, thereby allowing for comparability of prices among countries, all of which will improve the efficiency of markets.

The Common Central Bank will enhance credibility of financial policy through the imposition of strict rules of monetary management and thereby attract the inflow of foreign capital. This will facilitate the stability of the currency and improve the purchasing power of workers in the sub region. For the informal sector operators who trade in the sub region, the common currency will lower their transactions costs and losses associated with currency fluctuations. For the financial sector operators like the insurance companies, the single currency and the concomitant creation of a common economic space in the WAMZ will provide greater opportunity for business and broaden the market for risk management, thereby creating a level playing field for eventual participation in the global financial sector.

5.3 *Concluding Remarks*

The above challenges not with standing, it is our considered opinion that with zeal and determination the programme could be actualized. We have all it takes tasks to face the challenges squarely. The challenges may be daunting, but given the benefits, it is in our collective interest to confront the challenges and resolve to work toward the attainment of the second monetary zone. For the choice we make today will affect our tomorrow. To secure our tomorrow, the time is now for us to

work assiduously.

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Appendix 1 Proposed and existing Monetary Unions

Potential Monetary Unions/Enlargement of Current Monetary Unions	Country	Further Information
Europe	Current Euro zone (12) + country out of Euro zone (3) + candidate countries (10) ⁽ⁱ⁾	Operational and expanding
East Africa	Kenya, Tanzania, Uganda	Signed a treaty (in 1999) forming an economic block and monetary union, which is reviving their former currency union
West Africa	Economic Community of West African States (ECOWAS): Benin, Burkina Faso, Guinea-Bissau, Mali, Niger, Côte d'Ivoire, Senegal, Togo, Gambia, Ghana, Guinea, Liberia, Nigeria and Sierra Leone	ECOWAS Monetary Cooperation Programme initiated in 1987
West African Monetary Zone	Gambia, Ghana, Guinea, Liberia, Nigeria and Sierra Leone	Declared (in April 2000) the intention to form a broader monetary union. New commencement rate is December 2009.
Arabian Gulf	Gulf Co-operation Council (Bahrain, Qatar, Kuwait, Oman, Saudi Arabia and United Arab Emirates)	Announced in early 2002, a custom union by 2003 and a plan for a common currency by 2010. New currency, possibly to be called the Gulf dinar, will be established, and is likely to be pegged to USD
Asia	ASEAN (Brunei, Burma, Cambodia, Indonesia, Laos, Malaysia, Philippines, Singapore, Thailand and Vietnam)	Leaders of ASEAN endorsed (in December 1988) a project to study the feasibility of their currency, "ASEAN currency".
Australia and New Zealand	Monetary integration among: (a) Australia and New Zealand or (b) adopting the Australian dollar by New Zealand ⁽ⁱⁱ⁾	
South America	MERCOSUR (Argentina, Brazil, Paraguay and Uruguay) + associate members (Bolivia and Chile)	Two discussed strategies: (i) the common currency adopted would be the USD or (ii) to create the regional "Mercosur" currency. Currently, due to crisis in Argentina this project is more medium term oriented.

Source: Compiled by the Author