Bullion

Volume 18 | Number 4 Article 3

12-1994

Sources and management of external reserves in Nigeria.

Newman C. Oputa
Central Bank of Nigeria

SOURCES AND MANAGEMENT OF EXTERNAL RESERVES IN NIGERIA

BY

Newman C. Oputa

Abstract

Reserves are all those foreign assets of a country held by the monetary authorities which can be mobilized at periods of external imbalances with ease and certainty. External reserves are held either in the form of "earning assets" notably government's foreign securities or in the form of "non-earning" liquid assets like gold bars in the vault of Central Banks. In Nigeria, the composition of the external reserve consists of gold, IMF reserve tranche, Special Drawing Rights (SDRs) and convertible currencies. The major sources of external reserves are derivable from the components of foreign exchange inflows which include: receipts from petroleum, service incomes, other invisible items, capital importation, interest payments on foreign securities, external borrowing/ foreign aids and grants, non-oil export proceeds among others. Over the years, the external reserve management policy measures put in place had been trade and exchange control, foreign exchange budgeting, foreign currency diversification and exchange rate. A review of the attained levels of reserve for the period 1970 through 1993 using the reserve/import ratio revealed that the levels of external reserve were considered inadequate in 1970-1973, 1978, 1981-1985, 1987-1988, 1992 and 1993 while adequate levels were sustained in 1974-1977, 1979-1980, 1986 and 1989-1991. The periods of reserve adequacy corresponded with years of improved receipts from the oil sector while periods of inadequacy were characterized by huge outpayments. An analogy drawn from the analysis was that regulations were tightened during periods of declining reserves while the value of imports surged immediately after periods of reserve build-up. Also, in the 1970s exchange control measures applied were meant to conserve the level of reserve while in the SAP period, deliberate policy measures were directed at shoring up the value of the reserve through the exchange rate policy measures. A critique of policy measures in the pre-SAP period showed inconsistency in the set objectives pursued while in the SAP years, the exchange rate policy measures proved unsuccessful with the sustained rates not generally accepted as being realistic. Suggestions proferred were the urgent need for a medium to long-term external reserve management policy guidelines for the country, a revisit of the option for the establishment of investment offices in few commercial centres abroad to handle the management of the country's foreign securities and engage in rigorous portfolio forecasting and management, the full implementation of the government's export policies to increase inflow, the effective enforcement of the reserve/current liabilities criterion to allow for a sustained reserve build-up and the determination of a more realistic exchange rate that would shore-up the value of the external reserves.

1. INTRODUCTION

Reserves are external assets of a country which are made readily available to and controlled by monetary authorities for direct financing of payments imbalances, for indirectly regulating the magnitude of such imbalances through intervention in exchange markets and/or for other external commitments[1]. The level of reserve in a country is influenced by external sector developments such as international trade transactions, exchange rate, external debt and other related external obligations. However, when reserves are used for financing domestic foreign exchange needs, they could exert pressures on the internal monetary environment. Thus, if a country's trade volume increases, banks and other financial intermediaries may exert increasing pressure on her international reserves. This scenario calls for a continuous effort by a country at effectively managing her reserve to an optimum level that would sustain her numerous external commitments.

The concept of reserves should encompass those assets over which the monetary authority of a country exercises direct and effective control and this conditions must be applied "very strictly." A country's external assets may be erroneously confused as its external reserves. Nigeria's external assets comprise mainly of the foreign holdings of the Federal Government, semi-official institutions, state governments, commercial and merchant banks and that of the Central Bank. The monetary authority's component of the external assets constitutes the external reserve of the country. External reserve may be interpreted in terms of its gross or net position. The gross reserve comprises the monetary gold, the reserve position in the Fund, convertible foreign currencies referred to as the foreign exchange reserve and SDRs with the Fund. The net reserve is a residual component derived from subtracting the current foreign liabilities of the monetary authorities from the gross reserve (Gross reserve minus current foreign liabilities). However, the gross

[1] IMF (1993), "Balance of Payments Manual" Fifth Edition, Page 97.

concept is the most acceptable measure, since it indicates in totality the level of a country's external assets that is avaialble to the monetary authorities, part of which can be used for the financing of payments imbalance without recourse to adjustment measures. Reserves can be used in any economy for the meeting of external payment obligations, the intervention in the domestic foreign exchange market to maintain the value of the country's currency and as sources of investment for a country through the diversification of its foreign exchange resources. In general, reserves are all those short-term foreign assets of a country held by the monetary authorities which can be mobilized at any moment of external imbalance with ease and certainty without loss of value.

The main purpose of this paper is to identify the sources of external reserves in the economy, articulate the major management policy measures and try to present a critique of these measures in addition to a critical analysis of reserve adequacy over the years. This exercise is intended at complementing other research efforts on the subject matter but more especially to serve as an up-date to early works. The rest of this paper is organised as follows: Part 2 identifies the composition and sources of external reserve, Part 3 explores external reserve management policy measures before and during the structural adjustment era, Part 4 presents the measures of and analysis of reserve adequacy while the paper is concluded in Part 5 with a critique of reserve management policy measures and concluding remarks.

2. COMPOSITION AND SOURCES OF EXTERNAL, RESERVES

The first part of this section will attempt at expostulating the composition or forms of external reserves in Nigeria as distinct from the various sources.

2.1. Composition

Reserves may be held in the form of "earning-assets" like short-term foreign government securities or in the form of "non-earning" liquid assets like gold bars in the vault of Central Banks. Section 25 of the Central Bank Act as amended in 1962 provided that the monetary authority (CBN) should hold its external assets (reserves) in the form of one or a combination of the following: gold or bullion; bank balances; bills of exchange; government or government-guaranteed securities of not more than 10 years maturity; treasury bills; securities of international financial institutions of which Nigeria is a member provided such securities have a maturity of five years; gold tranche with the IMF and SDRs[2].

Today, the main forms of Nigeria's external reserves are gold, convertible currencies, SDRs, and gold tranche with the IMF. Of these forms, the value of foreign exchange reserve (convertible currencies) ranked highest. The explanation to this is that gold as component of reserves do not attract income; in addition there is the burden of storage if very large quantities are to be kept in Central Bank vaults. Thus, the net cost of holding gold assets would definitely be higher when compared with other forms of income-earning reserves assets. It therefore follows, that a country's optimum reserve management strategy should be that which deplores more resources into income-earning reserve assets. The attributes of the various forms of reserves in the country are articulated below:

2.1.1 Gold Reserve

Gold money are metallic coinage which were used during the gold standard as a store of value and for the settlement of international transactions. When gold in the vault of Central Banks are used to increase the international liquidity of a country, they then qualify as external reserve assets. With the advent of paper money or convertible currencies as reserves, the composition of gold to total world reserves had been on the decline. However, gold reserve has continued to be part of external reserves of most countries due to its intrinsic value and its acceptability in the settlement of some country-to-country international exchange obligations. Gold reserves are distinct from commodity gold because they are owned and effectively controlled by the monetary authority. In modern times, transactions in gold reserves occur only between Central Banks or between a Central Bank and International Monetary Organisations. Gold and foreign exchange assets are held in most countries as cover for notes and other Central Bank liabilities. In Nigeria, gold reserve which are stated at cost stood at N14.2 million or $19.9 million in the early 1970 rose to N19.0 million or $33.9million in 1979 and had remained at this level in naira terms. However, in dollar terms, the value fell below a million in 1993. The share of gold to total reserve asset had also been on the decline at 13.6 per cent in 1970, it averaged 2.9 per cent in 1971-1980, 1.0 per cent in 1981-1990 and was only 0.1 per cent in 1993.

2.1.2 Gold Tranche/Reserve Tranche[3]

Gold tranche and SDRs are unconditional international reserve assets arising from a country's subscriptions to the Fund. Gold tranche are net creditor claims on the IMF and defined simply as the member's quota minus

[2] CBN, *"Twenty Years of Central Banking in Nigeria: 1959-1979."*

the Fund's holdings of members own currency. The intrinsic value of gold as international reserve might have informed the Fund in establishing a rule that member countries quota be paid in a proportion of 25 per cent gold and 75 per cent of members own currencies.

The value of gold tranche in Nigeria was N24.8 million or $37.7 million in 1973, by 1981 it had hit N331 million or $519.7 million. However, due to the depression in the external sector and the need to finance foreign trade commitments and other foreign obligations, the gold tranche was completely drawn-down in 1982 and 1983. By 1988, the gold tranche as a component of Nigeria's reserve assets resurfaced and by 1993 it stood at N2.1 million or $0.1 million.

2.1.3 Special Drawing Rights (SDRs)

Special Drawing Rights are reserve assets created by the IMF and allocated to its member countries in accordance with their respective quotas. SDR was initially conceived as "paper-gold" fixed to the official US dollar price of gold but currently they are denominated in terms of a basket of five currencies. SDRs are not sources of borrowing from the Fund but are to supplement gold and convertible currencies in increasing the international liquidity position of member countries. No country is allowed to run down its holding of SDRs unless it had a balance of payments need to use them or when acquiring other members' currencies or to extend loans to member countries. In Nigeria, SDR became a component of external reserve in 1971 with an initial value of N22.3 million or $33.9million but the value varied over the years and stood at N4.6 million or $0.2 million at end-December, 1993.

2.1.4 Convertible Currencies

Convertible currencies are foreign exchange component of external reserve assets. They are defined as the monetary authorites' claims on foreigners in the form of bank deposits, treasury bills, short-term and long-term government securities and other claims useable in the event of a balance of payments deficit. These currency reserves are basically acquired through the export of goods and services which form the bulk of the bank deposits, direct investment in foreign securities and other sources of foreign exchange inflows. Since the major components of foreign exchange reserves are "earned" assets they have invariably dominated Nigeria's stock of reserves. Foreign exchange reserve as a proportion of total reserve was 78.7 per cent in 1970 by 1992 its share had propelled to 99.8 per cent and further increased to 99.9 per cent in 1993 revealing the emerging prime role of foreign exchange as a component of external reserve assets in Nigeria.

2.2 Sources of External Reserve in Nigeria

The sources of external reserve of a country are often times treated as being synonymous with sources of foreign exchange because of the prominence of the latter to the total reserve in the economy. This may not be exhaustive in real terms since there are other primary sources of reserve namely gold, IMF reserve tranche and SDRs which also affect a country's international reserve position. Thus, an increase in either the market value of gold in Central Bank vaults or deliberate policy of increasing the quantity of gold component will certainly increase the level of a country's external reserve. Similarly, this effect applies to an increase in SDR quota of a country. However, in Nigeria, the level of these primary sources has been relatively low over years. Consequently, the sources of external reserve are derivable from the foreign exchange receipts. Reserves are linked to the net of inflows and the outflows of foreign exchange which represents the difference between foreign receipts into and outpayments from the economy. It is the movement of the aggregates of foreign exchange receipts that influences the stock of reserve with due recognitions to what happens to the outpayments. Thus, *ceteris paribus,* reserves are expected to increase if inflow rises with outflow remaining constant or when outflow decreases and inflow held constant. Likewise, the stock of reserve will decline when inflow falls and outflow increases or inflow stagnates and outflow increases.

The major sources of foreign exchange reserve in Nigeria can be grouped into the public and private (autonomous). The components of public sector inflow are receipts from petroleum; service incomes and other invisible items; capital importation; CBN inter-bank transactions; interest payments on reserves, foreign investment and Foreign Exchange Market (FEM) account; external borrowings and foreign aids in addition to other "special accounts." Of these sources, receipts from oil showed dominance accounting on the average for 79.2 per cent of total inflow for the period 1981-1993. CBN cash flow data revealed that oil sector inflow was $10,180.9 million in 1981 representing 81.5 per

[3]An IMF publication-"the IMF's Statistical Systems" (1991) noted that "a member's reserve tranche position is equal to its quota less the adjusted Fund holdings of its currency, less subscription receivable and less the balances held in the administrative accounts of the Fund to the extent that they do not exceed 0.1 per cent of member's quota if positive."

cent of total foreign exchange inflow. However, the share of oil sector to total inflow was highest at 92.4 per cent in 1985 but averaged 74.5 per cent in the period 1986-1993. The component parts of oil sector receipts include direct sales from petroleum exports, royalties, Petroleum Profit Tax (PPT), rentals from oil companies, and other dedicated accounts. The private sector (autonomous) inflow represents that component of foreign exchange resources which is sourced through the banks (merchant and commercial), other financial intermediaries and corporate organisations independent of the official inflow. These sources of foreign exchange are derived from non-oil export proceeds (agricultural products, minerals and manufactured goods), invisibles (freight, personal home remittances, contract fees, insurance, etc), direct foreign investment, across the counter purchases, draw-down on loans and special grants. The foreign exchange generated through all these sources are utilized for the financing of major components of outflow notably imports (visibles), debt service obligations and any other external commitment that might arise. In general, accretion to the reserve position would be a reflection of the movement in these sources of reserve taking into cognisance the quantum of external outpayments in the economy (that is the balance between total inflows and total outflows).

3. EXTERNAL RESERVE MANAGEMENT

External reserve management involves the optimal deployment and allocation of a nation's foreign exchange resources with a view at achieving set objectives aimed towards external balance. There are two facets to reserve management - external and internal. The external aspect implies the monitoring of the composition of the portfolio of foreign reserve to preserve its value, maximize the earned income from reserve currencies and ensure that all foreign payment obligations are met without recourse to external imbalances. The second, applies to measures designed at improving the foreign exchange earning capacity of a country in addition to its optimal allocation to meet domestic demands for imports and other external needs. Thus, external reserve management can be critically examined against the backdrop of the balance of payment position, the level of available reserves, imports and exports, public debt, and the exchange rate. In Nigeria, the Exchange Control Act of 1962, made it mandatory for the Central Bank of Nigeria (CBN) to hold and manage the external reserves of the country.

3.1. External Reserve Management Policy Measures

The main policy measures employed in external reserve management are: trade and exchange control, administrative, currency diversification, foreign exchange budgeting and exchange rate. These measures try as much as possible to maintain a balance between demand for and the supply of reserves in order to meet the desired policy objectives and optimal reserve targets.

3.1.1. Trade and Exchange Control

Trade and Foreign Exchange Control measures are geared primarily at the curtailment of huge outpayments of foreign exchange thereby allowing for the build-up in the levels of reserve. The main objectives of exchange control policy may be summarized as the improvement of the BOP through the maintenance of a consistent level of reserve, maximization of foreign exchange receipts from all available sources and its optimal utilization in addition to assuring that confidence is maintained in respect of external transactions. In Nigeria, the periods of stringent control measures corresponded with most years of the 1970s extending to 1986. The exchange control measures in Nigeria were directed towards restrictions on visible trade transactions through the use of import duties and complete ban of non-essential imports, the services account- the slashing of the basic travel allowances (BTA) to manageable levels, and some transactions in the capital account.

The relevance of exchange control to the economy in most of the period of use has been challenged. Some contended that without exchange control, our foreign exchange position would have been considerably worsened. Indeed, the foreign exchange reserves would have been completely wiped out given the rate of import bills (N1.2 billion monthly) prior to April 1982[4]. However, others cited the increased number of sharp practices that characterised the period and concluded that exchange control measures were ineffective in arresting the depleting external reserve position and the accumulated trade arrears in the economy. Thus, in 1986, a market-based policy under the Structural Adjustment Programme (SAP) was adopted, thereby ending the era of exchange control.

To compliment the exchange control measure were a number of administrative controls aimed at streamlining demand for imports and check the possible drain of available foreign exchange earnings. The instruments

[4] *Anifowose O. K., "Management of Foreign Exchange Reserve," CBN Bullion, July/September, 1983.*

used were Form "M" registration, monitoring of the utilization of Import Licences, Comprehensive Import Supervision Scheme (CISS), ban on issuance of a second original Clean Report of Findings (CFR) to importers for the purpose of external trade contracts, and suspension of Bills for Collection and Open Account payment arrangement.

3.1.2 Foreign Exchange Budgeting

The persistent demand-supply gap in the management of the country's foreign exchange earnings made the budgeting of these resources inevitable. The main focus of foreign exchange budgeting had been the attainment of efficiency in the allocation of available foreign exchange receipts to some targeted sectors to meet domestic demand for such imports and other external commitments. The underlining principle of budgeting presupposes that planned expenditure must take into consideration the expected revenue while payments for current transactions were expected to be made on current basis. Budgeting as a reserve management measure was first introduced in 1971 and was a regular feature of the exchange control era. It was however, intensified in 1984 when a system for allocating foreign exchange to authorized dealers on sectoral basis was put in place. It was further used during the SAP period as a complimentary measure to exchange rate policy. Budgeting was intended to harmonize import licencing with foreign exchange receipts. The reintroduced foreign exchange budgeting in 1984, led to an appreciable improvement in the external reserve position. The reserve level which dropped to $1,044.2 million in 1983 from $1,531.6 million (1982) rose by $370.9 million or 35.5 per cent to $1,415.1 million in 1984. In the SAP years, the available foreign exchange inflows were allocated to three main uses namely; domestic (through the Foreign Exchange Market (FEM) to meet the domestic demand for imports), servicing the accumulated debt and lastly accretion to reserve. Generally, foreign exchange budgeting made it possible to estimate what accretion to or decrease from reserve could be at the end of a year, also it served as operational guide to officials handling various foreign exchange applications submitted for approval in connection with international transactions especially during the exchange control era.

3.2.3 Diversification Policy

Foreign currency diversification is a form of portfolio management which emphasizes the need for the preservation of the purchasing power of reserve assets. This is achieved through the switching of foreign bank deposits and securities held abroad on behalf of the federal governments from one convertible currency to another according to the relative strength of these convertibles in the international foreign exchange market. Hence, it maximizes reserve asset yields and guarantees the liquidity of the reserves. In Nigeria, this policy places more premium on the objectives of liquidity and safety rather than the profitability. Also, emphasis is on the need of keeping the country's external reserve in currencies of countries with very strong economic fundamentals and whose currencies are relatively strong in the international currency market rather than in the currencies of her trading partners. Diversification can only be pursued when the reserve position of a country is deemed comfortable. Although in Nigeria, there was a deliberate attempt to acquire other reserve assets notably gold and the US dollars in 1961, it was not until there was a remarkable increase in the level of reserve in 1974 that the Central Bank embarked on a vigorous asset diversification policy. Nigeria's foreign asset reserves were completely diversified into several strong currencies by 1976. Between 1971 and 1975, about 55.5 per cent of foreign exchange reserve of the country was denominated in pound sterling followed by the US dollar accounting for 26.9 per cent. However, from 1976, the US dollar dominated the foreign exchange component rising from 40.4 per cent of total reserve in the period 1981-1985 to 67.7 per cent in 1986-1992. In real terms, the share ranged from a low of 50.4 per cent in 1991 to a high of 91.1 per cent in 1991 (table 3)

3.2.4 Exchange Rate Policy

Exchange rate is the price at which a country's currency exchanges for other currencies in the international exchange system. The exchange rate has served as a major tool for pursuing reserve management objectives through the preservation of the value of the external reserve assets and the maintenance of a stable exchange mechanism. A stable exchange reflects a very strong domestic economic fundamentals which could result in the strengthening of the value of the domestic currency relative to the convertible currencies in which the reserves are kept. The exchange rate of a country may be fixed or managed like in Nigeria prior to 1986, or allowed to float in which case the rate will be determined by the interplay of market forces notably the demand for and supply of the currency in the foreign exchange market. In Nigeria, the techniques of exchange rate determination had varied over years in response to domestic economic exigencies. For instance, between 1960 and 1967, the domestic currency was maintained at par with the British pound sterling. The devaluation of the pound sterling in 1967 necessitated the switch to US dollar in which the domestic currency was determined at par from 1967 to March 1974. However, with the demonetization of gold and the advent of floating exchange regime in the international currency market Nigeria embarked on an independent exchange rate policy, effective April 1974, resulting in the fixing of the naira exchange rate separately to the US dollar and British pound. In 1978 the naira exchange rate was determined by the import weighted basket of currencies and was sustained till the introduction of the Structural Adjustment Programme (SAP) in 1986. A major policy package of the SAP was the Second-tier Foreign Market (SFEM) with a major aim of making the overvalued naira exchange rate more realistic and responsive to market forces. The Foreign Exchange Market (FEM) that was put in place since 1986 had evolved a number of systems for determining the exchange rates notably the Dutch Auction System (1987 and 1990) and the floating exchange rate regime (1992)[5]. These exchange rate regimes and the incorporated measures were aimed at securing the value of the currency and consequently the level of the nation's reserve.

4. ANALYSIS OF RESERVE ADEQUACY

4.1 Measures of Reserve Adequacy

The measures of reserve adequacy are difficult to ascertain since countries adopt different reserve management policies over time depending on prevailing economic circumstances. Some factors that might affect the adequacy of reserve are the rate of foreign exchange earnings and disbursements, motives for holding reserves and the ease of securing international credit. In most cases, a country starts to be conscious of applying adequacy criteria to the level of its reserve when there are observed depletion in her international liquidity position.

The measures in use include the universally accepted reserve/import ratio and the ratio of reserve to total demand liabilities which is more often legislated by governments and pursued by their monetary authorities. The first measure (reserve/imports) has the limitation of not capturing the magnitude of imbalances between receipts and all outpayments which the reserve can be used to finance. It thus, concentrates on the current account deficits with little emphasis on the capital account deficits and other external exigencies. The application of these two measures are not always rigidly implemented by most countries but are used as guides for achieving reserve management goals. Some studies have revealed that these two measures of adequacy may not actually be sufficient as criteria for optimal reserve management or sustaining a country from external and domestic imbalances. Remarkable among these studies was the work of Fritz Machlup (1966)[6] which related reserve not only to imports, but also to trade balance variations, capital outflows, past overall deficits, domestic money supply and current liabilities. In his view, the adequacy of reserve in any economy must be judged in relation to both international and domestic macro-economic variables.

With respect to the second measure of reserve adequacy, the legislation of most countries requires that their monetary authorities maintain a given amount of gold or of gold and foreign exchange in support of their domestic money supply. In Nigeria, the Central Bank Ordinance of 1958 required that the Bank should maintain an external reserve level "not less than the aggregate of an amount representing 60 per cent of the Bank's notes and coins in circulation together with an amount representing 35 per cent of the Bank's other demand liabilities[7]." This ratio was reduced to 40 per cent in 1962, further slashed to 25 per cent in 1967 and had remained at that level.

4.2 Analysis of Reserve Adequacy (1970-1993)

The internationally accepted level of reserve of any country should be that which can successfully finance a minimum of four months import bills at current monthly rate of importation. Using the reserve/import ratio as a measure of adequacy, we would attempt to examine the impact of some economic developments and policy measures on the reserve level in most of the 1970s and the 80s.

A critique of the reserve position in Nigeria for the two decades 1970 through 1993 revealed a mixed performance. Foreign reserve could be considered inadequate in 1970-1973, 1978, 1981-1985, 1987-1988, 1992 and 1993 while adequate levels of reserve were sustained in the years 1974-1977, 1979-1980, 1986 and 1989-1991 (Table 2).

4.2.1 Periods of Inadequate Level of External Reserves

The reasons for the inadequacy of

[5] *CBN Brief.*

[6] *Fritz Machlup, "The Need for Monetary Reserves," Banca Nazionale del Lavoro Quarterly Review, No. 78 (September 1966).*

[7] *Ibid, CBN.*

reserves that characterized the post Nigerian civil-war period of 1970-1973 was linked to the government's need for foreign inputs to reconstruct the damaged war affected areas which increased importation. Also, the liberalization of external transactions after the war and the liquidation of short-term liabilities accumulated during and immediately after the war exerted pressures on the reserve through increased outpayments. In 1978, even though the BOP showed sign of improvement, the huge monthly import disbursement of about $1,229.1 or N745.7 million was uncomfortably high and the reserve level could only support 1.7 months of imports. In 1981, the monthly imports had peaked to $2,012.9 or N1,218.2 million, this and other external sector developments resulted in a draw-down in the external reserve level from $10,000.9 or N5,445.5 million in 1980 to $3,807.2 or N2,424.8 million. During the period 1981-1985, the monthly import bills averaged N831.2 million with the reserve position only able to support about 1.1 months of import in 1982 and 1983, and 2.5 months of import in 1985. It is important to note here, that in 1984, the government enforced a prudent foreign exchange management measures which reduced the average monthly imports from $988.4 or N741.9 million in 1983 to $796.9 or N598.2 million in 1984.

However, this could not be sustained in subsequent years due to pressure on the government to meet the shortfall in domestic production for most essential imports - milk, sugar, rice, frozen-fish, chicken etc. The periods, 1987-1988 and 1992-1993 in which reserve positions were inadequate were similarly characterised by huge outpayments thereby depleting the reserve level.

4.2.2 Periods of Adequate Level of External Reserves

The years of adequate reserves corresponded with the period of improved receipts from the oil sector. In 1974, the posted price of crude petroleum rose from $8.31 per barrel in December 1973 to $14.69 per barrel in January, 1974. This increased the value of crude petroleum export. Similarly, the reserve position improved from $366.3 or N241 million at end-December 1973 to $5,051.1 or N3,112.5 million in 1974 capable of supporting the highest months of import commitments for the decade - 21.5 months (Table 2). However, the accumulated inflow drifted downwards over the period 1975-1977 with the reserve level just able to support 4.1 months of import in 1977. Also, in 1979, the external sector showed a turn-around with repeated surge in oil price swinging from $14.12 per barrel in December 1978 to $29.97 per barrel in 1979. By 1980, the price had hit $37.00 per barrel with a peak of $40.00 per barrel in January 1981. Thus, the reserve level rose from $5,429.4 million or N3,043.2 million in 1979 to $10,000.9 million or N5,445.5 million in 1980 capable of supporting 5.5. months of imports. The implementation of structural reforms introduced in 1986 resulted in the reduction of the average monthly imports from $740.8 or N661.1 million in 1985 to $287.8 or N498.6 million in 1986. Consequently, the reserve level rose from N1,641.1 million in 1985 to N4,643.3 million in 1986 which could support 7.2 months of imports. However, due to the realignment of the exchange rate in 1986, the value of the external reserve dropped in dollar terms. The deliberate policy of CBN to build-up external reserve between 1989-1991 resulted in relatively increased reserve position for the period, averaging $3,375.9 or N30,886.6 million. During this period, complementary gains were also recorded from the temporal increase in the price of oil at the instance of the Persian-Gulf War of the 1990.

From the foregoing, the analogy drawn is that regulations were tightened during periods of declining reserve position while the value of imports surged immediately after the period of reserve build-up. In the 1970's exchange control measures were used to conserve the level of reserve while during the SAP period deliberate policy measures were directed at shoring up the value of the reserve through exchange rate policy measures.

5. CRITIQUE OF EXTERNAL RESERVE MANAGEMENT AND CONCLUDING REMARKS

5.1 Critique of Policy Measures

(a) Pre-SAP Period (1970-1985)

The predominant reserve management policy measure put in place by the monetary authority in the 1970s and the most half of 1980s was the foreign exchange control. The other complementary measure-the exchange rate policy was rather passive and administered. An effective fusing of these two reserve policy measures would have yielded a much more desired external reserve management policy-mix that should have guaranteed optimal foreign resource utilization and allocation. However, a critical examination of developments during this period revealed inconsistency in the set objectives pursued.

Basically, the exchange control measures were geared towards the curtailment of huge outpayments. On the other hand, the administered exchange rate policy of the 1970s up till

1986, conflicted with this objective. For instance, the parity policy stance for most of the period made imports relatively cheap. An appropriate approach would have been for the country to adjust the exchange rate downwards (gradual devaluation) to make the exports more competitive and imports expensive (elasticity approach to BOP). This scenario, *ceteris paribus* would have increased inflow and reduced outflow, and consequently ensure the continuous build-up in the reserve position. Although, the experienced reserve build-up in some years of the period cannot be rightly attributed to the exchange control policy measure pursued but largely to the improved world price for crude petroleum. During the period, the exchange mechanism showed an overvalued exchange rate which accommodated cheap importation of non-essential items resulting in huge outpayments. The exchange control policy measure became ineffective cumulating in large trade arrears. The pressure on the external sector was indeed severe with the reserve level which peaked at $10 billion in 1980 dropped low to $1 billion in 1983. Also the average monthly import had mounted to a high of $1.9 billion in 1982. The effect of the overvalued exchange rate on the rate of importations impacted negative signals on the real sector production. Beside the crashed international commodity market in the late 1970s, the wrong pricing system which was manifested in the exchange rate discouraged non-oil export activities. The tariffs and other trade and payments restriction reminiscence of the exchange control era indirectly affected the level of trade and specialization in the economy. The import-substitution strategies that were enforced failed since the manufacturing sector could not attain the required degree of efficiency and flexibility that would make their goods competitive in the international market, thereby hindered export diversification. The exchange control policy measures were saddled with numerous fundamental problems. The policy was later perceived as measures that only suppressed these problems but could not solve the internal structural imbalances. Exchange control policy involved a complex cost system-administrative cost for enforcing the controls and private cost in trying to evade the controls. Enforcement of the policy measure also encouraged corruption and sharp practices. Some of which included the overloading of invoices to aid illegal transfer of foreign exchange abroad, importation of obsolete machinery for production in addition to sub-standard visible import items, falsification of trade documents and lastly foreign exchange claims for goods not imported into the country or services not rendered.

(b) SAP Period (1986-1993)

In the SAP years, the economy was deregulated and the pricing system liberalized. Thus, the exchange rate was determined through an auction system based on the forces of demand for foreign exchange by the end-users via their banks and the available supply put in for utilization by the CBN. The exchange rate emerged through the interplay of market forces derived from any adopted method put in place by the monetary authority using the bid rates from the banks and the CBN selling rate. Despite the conscious efforts at trying to achieve the objectives of this market determined system, the rates that were sustained could not be generally accepted as realistic. Effective exchange rate in Nigeria has remained an unresolved issue in contemporary discuss in the country today. Research efforts and the frequent fine-tuning of exchange rate policy measures proved unsuccessful and ineffective. The two markets that evolved-official and parallel compounded the already precarious situation as reflected in the instability that persisted in the system's foreign exchange market (FEM). The FEM was characterized by widened premium in the segments of the market irrespective of the two successive mergers in July 1987 and March 1992. The wide premium that existed was attributed to sharp practices perpetuated by the operators in the market notably the authorized dealers in addition to other speculative activities emanated from end-users and collaborated by the banks. Also, the market witnessed limited supply of foreign exchange which could not offset the excessive demand. These worrisome developments might have informed the Federal Government to derail from the deregulated policy stance of the SAP years resulting in the fixing of the exchange rate at N22.00 to $1.00 in fiscal 1994. Although, this has been perceived as a stop-gap policy measure pending the involvement of a more acceptable and effective exchange rate that can be relatively stable and sustain the country's productive activities.

(c) Reserve Adequacy

In 1975, the government established a task force[8] on the utilization of external reserve to look into among other terms of reference, the diversification of the country's external reserve. A major recommendation was that the country's external reserve should be enough to cover 6-9 months import

[8] *See CBN (1979) Twenty Years of Central Banking in Nigeria, Pages 167-168.*

bills and the balance invested in non-reserve assets in foreign commercial centres. Laudable as this may be, the country during the period 1976-1993, could attain this target only in two years - 1977 (7.1 months) and 1990 (9.6 months). This development revealed an unsatisfactory performance when critically evaluating the adherence to the reserve policy target put in place in most of the period under review.

5.2 Concluding Remarks

A country needs to intensify the strategies of external reserve build-up to enable it meet immediate external commitments and thereby strengthen its economic fundamentals. Though the CBN had made concerted efforts during the period under review to manage the nation's external reserve, there is an urgent need for a well articulated medium to long-term external reserve management policy guideline for a country like Nigeria that is well endowed with numerous resources which when properly managed could eventually increase the present level of foreign exchange earnings. Therefore, it should be appropriate at this time for the government to revisit the option of opening small Investment (units) offices in few commercial centres abroad for the effective implementation of the diversification and other international investment (portfolio) management policies as they affect external reserves. The resultant gains from this could sustain the country during period of external shocks arising from lower prices for crude petroleum in the international market.

If a country's foreign exchange reserves are depleted, it may resort either to borrowing externally if credible or adopt the stringent IMF structural reforms or fall back on import substitution measures. The last option is often favoured by most LDCs as immediate response to reserve shortfalls. In Nigeria, there are numerous policy measures aimed at the reduction in absorption and the enhancement of domestic production which should in the long-run reduce outpayments. Thus, it is recommended that the export policy drives of the government should be pursued more vigorously. Most especially, the Export Processing Zones (EPZs) should be completed and commissioned without further delays. Also, it would be necessary for an effective enforcement of the reserve/current liabilities criterion of reserve adequacy in the system as an essential guide at achieving sustainable optimal reserve levels. The strict adherence will not only ensure reserve build-up but compliment the domestic monetary policy efforts in controlling internal monetary expansion. In addition, the government should make conscious moves towards achieving an equilibrium exchange rate that would in effect shore-up the value of the country's external reserve. A stable exchange rate could also be a recipe for the convertibility of the naira in the sub-region and eventually attain the posture of reserve currency.

Finally, the paper examined the main sources of external reserve in Nigeria as distinct from the components of external reserves, articulated the external reserve management policy measures put in place to ensure external payment balances and shore-up the value of the reserve assets and further presented the measures and analysis of reserve adequacy over a period of two decades. However, some credence may be given to the reserve assets diversification and the intensified foreign exchange budgeting policy pursued during the SAP years. Though, the reserve build-up during periods of high receipts from oil export resulted in corresponding huge outpayments reflected in high demand for imports. This internal structural imbalance has not been successfully tackled by the government and had tended to impede any remarkable gain realized from the CBN reserve management policies.

TABLE: 1
COMPOSITION OF NIGERIA'S EXTERNAL RESERVE
(In Million Naira)

YEARS	Gold	Special Drawing Rights (SDRs)	Reserve Position with the IMF	Foreign Exchange with the CBN	Total External Reserve	Gold (% of Total)	Special Drawing Rights (SDRs) (% of Total)	Reserve Position with the IMF (% of Total)	Foreign Exchange with the CBN (% of Total)
1970	14.2	0.0	8.1	82.3	104.6	13.6	0.0	7.7	78.7
1971	14.2	22.3	8.1	87.7	132.3	10.7	16.9	6.1	66.3
1972	14.2	32.5	9.2	135.7	191.6	7.4	17.0	4.8	70.8
1973	15.8	35.9	24.8	164.5	241.0	6.6	14.9	10.3	68.3
1974	15.8	37.5	25.1	3034.1	3112.5	0.5	1.2	0.8	97.5
1975	15.8	40.6	24.8	3298.9	3380.1	0.5	1.2	0.7	97.6
1976	15.8	44.8	24.7	2972.3	3057.6	0.5	1.5	0.8	97.2
1977	17.3	50.7	31.0	2422.0	2521.0	0.7	2.0	1.2	96.1
1978	18.2	56.3	309.5	865.1	1249.1	1.5	4.5	24.8	69.3
1979	19.0	79.6	219.7	2724.9	3043.2	0.6	2.6	7.2	89.5
1980	19.0	92.0	257.8	5076.7	5445.5	0.3	1.7	4.7	93.2
1981	19.0	177.2	331.4	1897.2	2424.8	0.8	7.3	13.7	78.2
1982	19.0	29.9	0.0	977.6	1026.5	1.9	2.9	0.0	95.2
1983	19.0	77.4	0.0	685.3	781.7	2.4	9.9	0.0	87.7
1984	19.0	6.6	63.8	1054.4	1143.8	1.7	0.6	5.6	92.2
1985	19.0	2.8	0.0	1619.3	1641.1	1.2	0.2	0.0	98.7
1986	19.0	0.9	0.0	3567.5	3587.4	0.5	0.0	0.0	99.4
1987	19.0	0.6	0.0	4623.7	4643.3	0.4	0.0	0.0	99.6
1988	19.0	0.1	0.5	3253.2	3272.8	0.6	0.0	0.0	99.4
1989	19.0	3.2	0.5	13434.4	13457.1	0.1	0.0	0.0	99.8
1990	19.0	8.7	0.7	34924.7	34953.1	0.1	0.0	0.0	99.9
1991	19.0	0.0	0.8	44229.7	44249.5	0.0	0.0	0.0	100.0
1992	19.0	0.3	1.7	13971.5	13992.5	0.1	0.0	0.0	99.8
1993	19.0	4.6	2.1	29067.3	29093.0	0.1	0.0	0.0	99.9

TABLE: 2
NIGERIA'S EXTERNAL RESERVE :- Measure of Adequacy

YEARS	End-Year Exchange Rate N\$	Total external Reserve (In Million Naira)	Total external Reserve (In Million Dollar)	Averagemonthly Imports (In Million Naira)	Measure of Adequacy:- Reserve/Imports
1970	0.7143	104.6	146.4	63.0	1.7
1971	0.6579	132.3	201.1	89.9	1.5
1972	0.6579	191.6	291.2	82.0	2.3
1973	0.6579	241.0	366.3	102.1	2.4
1974	0.6162	3112.5	5051.1	144.8	21.5
1975	0.6267	3380.1	5393.5	309.8	10.9
1976	0.6308	3057.6	4847.2	427.7	7.1
1977	0.6514	2521.0	3870.1	608.1	4.1
1978	0.6475	1249.1	1929.1	745.7	1.7
1979	0.5605	3043.2	5429.4	720.3	4.2
1980	0.5445	5445.5	10000.9	987.5	5.5
1981	0.6369	2424.8	3807.2	1218.2	2.0
1982	0.6702	1026.5	1531.6	936.7	1.1
1983	0.7486	781.7	1044.2	741.9	1.1
1984	0.8083	1143.8	1415.1	598.2	1.9
1985	0.9996	1641.1	1641.8	661.1	2.5
1986	3.3166	3587.4	1081.6	498.6	7.2
1987	4.1916	4643.3	1107.8	1448.5	3.2
1988	5.3530	3272.8	611.4	2075.0	1.6
1989	7.6500	13457.1	1759.1	2571.7	5.2
1990	9.0001	34983.1	3887.0	3647.5	9.6
1991	9.8662	44249.6	4485.0	7457.4	5.9
1992	19.6609	13992.5	711.7	11929.3	1.2
1993	21.8861	29093.0	1329.3	13802.5	2.1

TABLE: 3

CURRENCY COMPONENTS OF NIGERIA'S EXTERNAL RESERVE

(in percentage)

	1971-1975	1976-1980	1981-1985	1986-1992	1986	1987	1988	1989	1990	1991	1992
Gold, IMF gold ranche, & oil Facility	6.1	8.0	4.4	0.3	0.5	0.4	0.5	0.2	0.1	0.1	0.2
Special Drawing Rights (SDRs)	6.6	2.9	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Convertible Currencies:-	87.3	89.1	90.6	99.7	99.5	99.6	99.5	99.8	99.9	99.9	99.8
United State dollar	26.9	20.0	40.4	67.7	76.2	69.6	66.6	67.3	50.4	91.1	52.6
British pound sterling	55.5	14.4	15.0	12.7	4.9	9.1	5.8	21.9	42.5	3.9	1.1
Deutsche mark	2.8	26.4	7.6	7.3	5.4	5.0	9.1	2.9	0.4	1.4	26.9
French franc	0.2	5.9	5.7	6.3	3.5	8.0	5.0	5.8	5.6	3.0	13.4
Canadian dolar	0.7	6.6	1.0	0.1	0.3	0.2	0.2	0.0	0.0	0.0	0.1
Japanese yen	0.4	7.2	2.3	0.1	0.0	0.0	0.0	0.0	0.1	0.1	1.2
Swiss franc	0.2	3.3	14.2	1.9	3.3	2.7	3.4	0.4	0.0	0.1	3.7
Belgian franc	0.0	3.5	2.1	0.2	0.2	0.4	0.6	0.1	0.0	0.0	0.1
Dutch guilder	0.0	1.5	2.0	1.4	3.4	2.5	3.7	0.3	0.0	0.0	0.0
Others	0.6	0.3	0.3	2.0	2.3	2.1	5.1	1.1	0.9	0.3	0.7
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE : 4

FOREIGN EXCHANGE FLOW IN AND OUT OF THE NIGERIAN ECONOMY

($ MILLION)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
1 INFLOW	11679.2	12121.4	12310.2	7204.1	6573.1	6474.1	7760.2	9359.2	11351.5	8409.3	7677.6
(a) Official	11679.2	12121.4	12310.2	6976.5	5510.3	5229.2	6597.7	7905.9	9907.5	6730.2	5951.1
-Oil	10192.5	11016.1	11367.2	5742.5	4659.3	4924.9	5913.2	7437.1	9562.3	6489.6	5658.4
-Non-oil	1486.7	1105.3	943	1234	851	304.3	684.5	468.8	345.2	240.6	292.7
(b) Private	n.a	n.a	n.a	227.6	1062.8	1244.9	1162.5	1453.3	1444	1679.1	1726.5
2. OUT FLOW	12095.6	11656.9	11731.7	6481.9	5312.8	6864	5575.6	7006.4	10789.7	9968	7348.4
(a) Debt Service	1984	3359	4029	1826	1602	1953.1	2131.2	3746.6	3573.8	2726.3	1644.7
(b) Domestic use	10111.6	8297.9	7702.7	4619.9	3710.8	4910.9	3444.4	3259.8	7215.9	7241.7	5703.7
3. NET FLOW	-416.4	464.5	578.5	722.2	1260.3	-389.9	2184.6	2352.8	561.8	-1558.7	329.2

REFERENCES

1. Anifowose, O. K. "Management of Foreign Exchange Reserves," **CBN Bullion,** July/September, 1983.
2. Arjun Sengupta, "Allocation of SDRs Linked to Reserve Needs," IMF and World Bank: **Finance and Development**, September 1986.
3. CBN, "External Reserve Management by the Central Bank of Nigeria," *CBN Briefs*. Research Department, Series No. 93/05.
4. ———, "Twenty Years of Central Banking in Nigeria, 1959-1979" Research Department.
5. ———, "Annual Reports" various issues.
6. Charles E. Staley, "International Economics: Analysis and Issues," Practice-Hall Inc, Englewood Cliff, New Jersey, 1970.
7. Fritz Machlup, "The Need for Monetary Reserves," **Banca Nazionale del Lavoro Quarterly Review, No. 78.** (September 1966).
8. IMF, "International Reserves and Liquidity", an IMF Study, Washington DC. 1958.
9. ———, "The IMF's Statistical Systems" in context of revision of the United Nation's "A System of National Accounts," IMF Washington DC, 1991.
10. ———, "International Money and Credit the Policy Roles" (ed.) George M. Von Furstenberg, 1983.
11. Milton, G. "The Gold-dollar System: Conditions of Equilibrium and the Price of Gold," Princeton University, Princeton, New Jersey, 1968.
12. NES, "Management of Nigeria's Foreign Exchange Resources," Proceedings of the 1985 One-day Workshop.
13. Obaseki, P. J., "Foreign Exchange Management in Nigeria, Past, Present and the Future," EFR Vol. 29, No. 1 March, 1991.
14. Ojo, M. O. "The Management of Foreign Exchange Resources Under Nigeria's Structural Adjustment Programme, EFR Vol. 28. No. 2, June 1990.
15. Ononye, P. O., "Determinants of Reserve-Holding Behaviours. A Case Study of Nigeria between 1961 and 1967," Dalhousie University Dissertation, 1973.
16. Oscar L. A., "The Management of International Liquidity," IMF Staff Papers, July 1964.
17. Otiti, A. O. G., "The Role of Central Bank of Nigeria in the Execution of Foreign Payments," **CBN Bullion,** July/September, 1983.
18. Thomas D. Willett, "International Liquidity Issues," American Enterprise Institute for Public Policy Research, Washington D. C.,