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Challenges of exchange rate volatility in economic management in Nigeria.

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CHALLENGES OF EXCHANGE RATE VOLATILITY IN ECONOMIC MANAGEMENT IN NIGERIA

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1. Introduction

The debate on exchange rate management has preoccupied economists and public sector managers for a very long time. This transcended the collapse of the gold standard in the 1930s to the emergence of the Bretton Wood System of adjustable peg from the 1940s, through the adoption of a flexible exchange rate regime by developing economies in the 1970s and those undergoing structural reforms in the 1980s, as well as in the aftermath of the currency crises in emerging economies in the 1990s. Besides factors such as market opportunity, political risks and the legal environment, business entities take exchange rate into consideration in making investment decisions. The focus has always been on the volatility of exchange rates in the foreign exchange market and its impact on business outcomes.

It has been established in literature that "getting the exchange rate right" or maintaining relative stability is critical for both internal and external balance and, hence growth in an economy. Failure to properly manage the exchange rate induces distortions in consumption and production patterns. Excessive volatility in exchange rate creates uncertainty and risks for economic agents with destabilizing effects on the macro economy. Private sector operators are concerned about exchange rate fluctuations because it impacts on their portfolios, and may result in capital gains or losses. Policymakers also focus on the pervasive effects of exchange rate movements on the economy and macroeconomic policy objectives of price stability, economic growth, employment and external viability.

Exchange rate is a key price variable in an economy and performs dual role of maintaining international competitiveness, and serving as nominal anchor for domestic prices. It is therefore, defined as the price of one currency vis-à-vis another and is the number of units of a currency required to buy another currency. Since the collapse of the generalized fixed exchange rate regime and the adoption of a generalized floating system by the industrialized countries in 1973, most countries including Nigeria, have experimented with various types of exchange rate arrangements ranging from the peg system to weighted currency basket to managed floating and more recently to the monetary zone arrangement. In practice there is nothing like a "clean" or "pure" float whereby the exchange rate is left entirely to the vagaries of market forces. The predominant system is the "dirty" or "managed" float whereby the monetary authorities intervene periodically in the foreign exchange market to achieve certain strategic objectives.

Economic management is concerned with the design and implementation of appropriate policies to enhance the performance of an economy in a desired, usually positive direction. The ultimate goals of economic management are increased prosperity as well as equity and sustainability. Economic management is taken at various levels with a view to keeping some key economic aggregates at improved level in cognisance with set macroeconomic targets and within a given period. The instruments of economic management are either macroeconomic (fiscal, monetary, exchange rate and external debt policy instruments) or microeconomic (sectoral policy instruments) comprising agricultural, industrial and social sector development policies (Ojo, 1995).

In Nigeria, the management of the exchange rate is vested in the Central Bank of Nigeria (CBN) and since the introduction of the Structural Adjustment Programme (SAP) in 1986, exchange rate management has been a core macroeconomic policy function. The overriding objective has been to achieve a realistic and stable exchange rate consistent with internal and external balance. Although many initiatives have been taken in pursuit of this objective, it had remained elusive until the most current dispensation in which some milestone success was achieved but the question is whether it is sustainable. Indeed, since 2005, the exchange rate has appreciated and has been relatively stable. The rest of this paper is organized into five parts. In section 2, we define some concepts that are germane to the topic at hand. Section 3 reviews

fundamental had been quite promising.

We have observed that the CBN has in a very technical way planned to position the Nigerian economy in a competitive manner using the market approach and electronically driven process of dealing in the foreign exchange market. There is less human intervention and there is recorded time efficiency.

The impact of the openness of the economy, the positive external shocks in terms of oil revenue; the unprecedented capital inflows arising from bank consolidation exercise - as well as their effects on the economic growth and robust external reserve levels have supported the convergence of the rates. This development has helped in not halting the incipient growth process that has just began for Nigeria

We agreed that the appreciation of Naira exchange rate is complementary to lower inflation rate considering the import dependent of the economy. Naira exchange rate has played an anchor role for the monetary policy management where effective liquidity management had made a success of the convergence of the rates in July, 2006.

In twenty years, the CBN has achieved the fit that had eluded the country by achieving convergence of the inter-bank rate and the BDC/Parallel rates. The key message here is that there is greater role exchange rate plays in the monetary policy management in an emerging market than the interest rate particularly in the Nigerian monetary transmission mechanism which is an import dependent economy. If this development is supported with more openness of the financial sector, it will increase growth effect of trade related shocks while attenuating the impact of regional capital inflows. More importantly, economic theories work in a market environment where human intervention is limited.

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the exchange rate policy regime and discusses exchange rate volatility in Nigeria. Section 4 takes a look at the determinants of exchange rate while the challenges of exchange rate volatility are examined in Section 5. The paper ends with some concluding remarks in Section 6.

2. Some Conceptual Issues

2.1.1 Rate of Exchange

Exchange rate has been defined as the price of one currency in terms of another. It can be expressed in one of two ways: as units of domestic currency per unit of foreign currency; or units of foreign currency per unit of domestic currency. For example, on December X, 200x, the Nigerian currency the Naira traded for N126.40 to a US dollar in the foreign exchange market giving an exchange rate of N126.40 per US$1.00 or US$0.0079 per N1.00. However, since transactions are often carried out in national currencies, the former is generally applied for exchange. In addition, distinction is often made in the foreign exchange market between buying, selling and central rate.

2.1.2Depreciation/Appreciation

Using the domestic currency per unit of foreign currency, when exchange rate increases (that is, the amount of domestic currency required to buy a foreign currency increases), the domestic currency is said to have depreciated while the foreign currency appreciates. Similarly, a decrease in the rate of exchange of the domestic currency for foreign currency implies an appreciation of the domestic currency and a depreciation of the foreign currency.

2.1.3 Foreign Exchange Market

The foreign exchange market is the market for buying and selling different currencies. It is the medium through which the interaction of demand and supply results in the determination of the rate of exchange of a local currency against other foreign currencies. In Nigeria, the foreign exchange market consists of the official window (DAS), the open inter-bank (OIB) market and the bureau de change(BDC) which are legal markets; as well as the parallel market, which is not officially recognized but operates as the "underground" window.

2.1.4 Exchange Rate Policy

Exchange rate policy encompasses the design and deployment of strategies to ensure the achievement of a stable and realistic exchange rate for the country's domestic currency, consistent with overall macroeconomic policy objectives.

2.2 Exchange Rate Volatility

Exchange rate volatility refers to the swings or fluctuations in the exchange rates over a period of time or the deviations from a benchmark or equilibrium exchange rate. The latter which also reflects the misalignment of the exchange rate could occur where there is multiplicity of markets parallel with the official market. The monitoring of these markets is essential because they tend to provide a signal (though not normally acknowledged in official circles) on exchange rate misalignment, particularly when official exchange rate deviates widely from what obtains in the free market. Empirically, volatility is measured in terms of the 'coefficient of variation' which is the standard deviation divided by the mean for a series. Fluctuations and price volatility may be measured on any time-scale, from year-by-year to day-by-day. Volatility over any time interval tends to be higher when supply, demand or both are liable to large random shocks and when the elasticity of both supply and demand is low. Price volatility tends to be higher for commodities, shares and exchange rates than for industrial products.

Once an exchange rate is not fixed it is subject to variations, thus floating exchange rates tend to be more volatile. The degree of volatility and the extent of stability maintained are affected by economic fundamentals. Strong economic fundamentals are meant to produce favourable economic conditions and outcomes which in turn would appreciate the currency and maintain relative stability in the market. Supporting this line of argument Friedman in his 1953 thesis noted that "… instability of exchange rate is a symptom of instability in the underlying economic structure …" For instance, the theoretical argument that exchange rate volatility may hinder trade is based on the fact that volatility represents uncertainty and will impose costs on risk averse traders. Exchange rate stability, which is essential for growth is influenced greatly by the appropriate policy mix by governments in their quest to attain macroeconomic targets.

In theory, a distinction is made between the short-run and long-run equilibrium exchange rates. The short-run rate refers to that established in a liberalized environment by the interplay of market forces demand and supply. The long-run equilibrium rate is the rate that would equilibrate the external balance in the medium and long-term as well as facilitate the achievement of macroeconomic stability. The purchasing power parity (PPP) clearly approximates the long-run equilibrium exchange rate. The concept of equilibrium exchange rate is useful for policy makers as it helps in determining the degree of over-valuation or under-valuation of a particular national currency.

2.3 Importance of Exchange Rate in the Economy

It is a vital price in an economy which influences most other prices and, indeed, the general level of prices. Consequently, exchange rate levels and movements have far-reaching implications for inflation, price incentives, fiscal viability, and competitiveness of exports, efficiency in resource allocation, international confidence and balance of payments equilibrium. Because of their widespread impact, exchange rate developments are a matter of interest and often concern, to government, the business community and the general public.

3. Exchange Rate Volatility in Nigeria

3.1 Nominal Exchange Rate

The exchange rate of the naira depreciated against the major intervention currency, the United States dollar from 1986 with the adoption of the flexible exchange rate regime. This development occurs in spite of the frequent changes in the technique of the determination of the exchange rate of the naira. From 1970-1985, the exchange rate averaged N0.67=US$1.00, but it depreciated to an average of N2.02, N8.04 and US$9.91 =US$1.00 in 1986, 1990 and 1991, respectively. It further depreciated to N17.30 and N22.05 = US$1.00 in 1992 and 1993, respectively. Owing to the persistent depreciation of the exchange rate, the exchange rate policy was completely reversed in 1994 with the re-introduction of a fixed exchange rate regime. Thus, the exchange rate of the naira was fixed at N21.8861 = US$1.00. The dismal performance of the economy at the end of that year compelled the authorities to re-introduce the market-based approach under the Autonomous Foreign Exchange Market (AFEM) from January 1995 till October 1999.

The exchange rate, which depreciated from the fixed rate of N21.8861 per dollar in 1994 to a high of N82.33 = US$1.00 in 1995, depreciated further to N84.38 = US$1.00 and N92.65 = US$1.00 in 1998 and 1999, respectively. The average exchange rate at N111.90 = US$1.00 for 2001 depreciated to N128.75 during the period 2002 - 2005. The trend analysis showed that the exchange rate in Nigeria has remained unstable over the years. However, some relative stability was achieved from 2003, with the rate actually appreciating in 2005 and 2006. Similarly, declining trend (depreciation) was observed in the other segments of the foreign exchange market as shown in figure 1 using annualized data for the period 1985 through 2006.

3.2 Exchange Rate Volatility

Using the generalized autoregressive conditional heteroskedasticity model (GARCH) and a high frequency monthly data for the period 1992 -2005 confirmed the high volatility of the Naira exchange rate as shown in Figures 2 and 3. Figure 2 introduces the period of regulation from 1994 to 1998, in which the exchange rate for official transactions was fixed at N21.6681 = US$1.00. Figure 3 however, presents a variant of figure 2 but with AFEM rates that are market determined under the guided-deregulation introduced in 1995.

3.2 Review of Exchange Rate Policy

The objectives of an exchange rate policy include determining an appropriate exchange rate and ensuring its stability. Over the years, efforts have been made to achieve these objectives through the applications of various techniques and options to attain efficiency in the foreign exchange market. Exchange rate arrangements in Nigeria have transited from a fixed regime in the 1960s to a pegged regime between the 1970s and the mid-1980s and finally, to the various variants of the floating regime from 1986 with the deregulation and adoption of the Structural Adjustment Programme (SAP). A managed floating exchange rate regime, without any strong commitment to defending any particular parity, has been the most predominant of the floating system in Nigeria since the SAP. Following the failures of the variants of the flexible exchange rate mechanism (the AFEM introduced in 1995 and the IFEM in 1999) to ensure exchange rate stability, the Dutch Auction System (DAS) was re-introduced on July 22, 2002. The DAS was to serve the triple purposes of reducing the parallel market premium, conserve the dwindling external reserves and achieve a realistic exchange rate for the naira. The DAS has helped to stabilize the naira exchange rate, reduce the widening premium, conserve external reserves and minimize speculative tendencies of authorized dealers. The foreign exchange market has been relatively stabilise since 2003.

The conditions that facilitated the re-introduction of DAS in 2002 included, the external reserve position which could guarantee adequate funding of the market by the CBN; reduced inflationary pressures; instrument autonomy of the CBN and its prompt deployment of monetary control instruments in support of the DAS as well as the bi-weekly auctions as against the previous fortnightly auctions, thus assuring a steady supply of foreign exchange.

In order to further liberalize the market, narrow the arbitrage premium between the official, inter-bank and bureau de change segments of the markets and achieve convergence, the CBN introduced the Wholesale Dutch Auction System (W-DAS) on February 20, 2006. The introduction of the W-DAS was also to consolidate the gains of the retail Dutch Auction System (R-DAS) as well as deepen the foreign exchange market in order to evolve

a realistic exchange rate of the naira. Under this arrangement, the authorized dealers were permitted to deal in foreign exchange on their own accounts for onward sale to their customers. The system has since been expanded to include not only the authorized dealers in foreign exchange, but also bureaux de change operators. In addition, banks have been directed to own and open bureau de change windows at their branches to enable them access the official foreign exchange window.

4. Determinants of Exchange Rate

4.1 Drivers of Foreign Exchange

Friedman (1953) had argued that exchange rate instability is a manifestation of economic volatility. The determinants of exchange rate include among others: economic fundamentals, such as the GDP growth rates, inflation, balance of payments position, external reserves, interest rate movements, external debt position, productivity; market psychology and expectations; socio-political factors; macroeconomic shocks and speculative contagion.

These drivers influence exchange rate dynamics through the demand for and supply of foreign exchange which can exert or ease the pressure on the market and cause the exchange rate to depreciate or appreciate. For instance, a draw-down of external reserves increase in external debt servicing, low productivity, macroeconomic shocks that precipitate capital reversals will, all things being equal, cause the exchange rate to depreciate. Political tension, social unrest, pipeline vandalisation and hostage taking usually send warning signals of a nation under siege and, therefore, not in a position to play host to foreign investment which could put more pressure on the foreign exchange market and cause distortions. This could also induce capital flight. Similar impact is expected for poor growth prospects and renewed inflationary pressures and expectations. Uneasiness in market psychology, as manifested in the phenomenal increase in foreign exchange demand for both hedging and speculative purposes, can trigger exchange rate movements. Exchange rates are strongly influenced by market expectations of future exchange rates, and these expectations are in turn influenced by beliefs concerning the future course of monetary and fiscal policies as well as socio-political developments.

Lack of depth at both the inter-bank autonomous and parallel market segments could induce speculative attack as a result of scarcity of foreign exchange in the market in the wake of increased demand pressure. Thus, relatively small changes in demand or supply are reflected in even larger and exaggerated movements in the exchange rate. Structural rigidities, the undue dependence of the economy on oil and imports, the poor performance of non-oil exports and low level of productivity in the country, also precipitates depreciation of the exchange rate.

4.2 Exchange Rate Movement and Macroeconomic Aggregates

Analysis of Nigeria's exchange rate movement from 1970-2005 showed that there exists a causal relationship between the exchange rate movements and macroeconomic aggregates namely inflation, fiscal deficits and economic growth. Consequently, the persistent depreciation of the exchange rate trended with major economic variables such as inflation, GDP growth, and fiscal deficit/GDP ratio. In this context, the exchange rate movements in the 1990's trended with the inflation rate. During periods of high inflation rate, volatility in the exchange rate is high, which is reversed in a period of relative stability. For instance, while the inflation rate moved from 7.5 per cent in 1990 to 57.2 and 72.8 per cent, respectively in 1993 and 1995, the exchange rate also moved from N 8.04 to $1 in 1990 to N22.05 and N81.65 to a dollar in the same period. When the inflation rate dropped from 72.8 per cent in 1995 to 29.3 and 8.5 per cent, in 1996 and 1997, respectively and rose thereafter to 10.0 per cent in 1998 and averaged 12.5 per cent in 1999-2005, the exchange rate trended in the same direction. A similar trend was observed for fiscal deficit/GDP and GDP growth rate as shown in figure 4.

5. Challenges of Exchange Rate Volatility

The naira exchange rate has been fluctuating since the introduction of the Structural Adjustment Programme (SAP) in 1986. The Nigerian situation since SAP has mostly been characterized by increasing demand which outstripped supply, contributing generally to the continuous depreciation of the naira. Several factors have accounted for the instability of the naira exchange rate among which are the expansionary fiscal and monetary policies, structural deficiencies in the economy, inadequate funding, as well as the role of the authorised dealers and other operational constraints. Therefore, the challenges facing economic management are curtailing the liquidity surfeit in the economy, maintaining and sustaining macroeconomic stability, reducing the high arbitrage in the foreign exchange market occasioned by rent seeking, reducing the high import dependency, curtaining the huge debt service payments, encouraging capital inflows and sustaining the current high level of external reserves.

5.1 Liquidity Surfeit

The exacerbation of the

Liquidity overhang in the banking system through excessive monetary growth occasioned by the rapid monetisation of petrodollars presents a major challenge to exchange rate stability and economic management. Huge budgetary releases used in financing imports amidst low output growth impact adversely on exchange rate and aggravate inflationary pressure. Uncertainty about future inflationary tendencies has diverted assets' holdings to highly volatile financial instruments with short-term maturities. Although excess liquidity is linked with the monetisation of foreign exchange receipts by government and rapid growth in aggregate credit, the real problem is with running deficits in the face of higher benchmark oil price and the financing of such deficits by the banking system as well as additional spending from excess crude oil receipts.

Government expenditure has been on the increase since the introduction of the SAP for various reasons. Government fiscal operations resulted in substantial deficits, rising from N5.9 billion in 1987 to N12.2 billion, N15.3 billion and N22.2 billion in 1988, 1989 and 1990 respectively. It further increased from N35.7 billion in 1991 to N171.9 billion and N293.3 billion at the end of 2001 and 2002, respectively before dropping in 2003-2005. Government budget deficits have serious implications for liquidity in the economy and the movement of naira exchange rate at the foreign exchange market, particularly if such deficits are financed by borrowing from the banking system. Concomitantly, the growth in broad money supply (M2) has been on the increase averaging 20.5 per cent in 2001-2005. Records also showed that the rapid expansion in money supply was attributed largely to the growth in credit to the government sector which poses a major challenge for exchange rate stability realizing its impact on demand for foreign exchange. Apart from 1989, 1995-1997 and 2004, when actual credit to government declined relative to the target, credit to government in other years was rather excessive.

5.2 Macroeconomic Stability

The problems of excess liquidity, excessive monetary growth, high and rising inflation and exchange rate in stability have been traced directly to government's fiscal operations. Distortions in these macroeconomic aggregates result in both internal and external disequilibrium. The excessive growth in monetary aggregate and continued banking system financing of governments' fiscal outcome has the tendency to increase the demand for foreign exchange and to exert more pressure on the exchange rate. Conversely, restraint on the growth of money and prudent fiscal operation would reduce the demand for foreign exchange and reduce stability in the exchange rate. Consequently, the challenge is for monetary and fiscal policies to be harmonized, to ensure exchange rate stability and macroeconomic balance.

5.3 High Import Dependency

The economy is highly dependent on import for both consumption and production. Virtually all the major industrial raw materials are sourced from abroad while the country depends wholly on foreign supply for intermediate and capital goods. Production for exports is highly inelastic because the major non-oil export products are basically primary produce whose prices have been on the downward trend and are exogenously determined. Besides, these exports are slow in responding to exchange rate adjustments. Most importantly, output of manufacturers is relatively low with most of the output consumed locally leaving very little for export. The implication is that the economy is highly prone to external shocks and in the event of a crash in oil price, the economy may face decline in foreign exchange earning which may destabilize the exchange rate. Also, the high level of importation to meet domestic needs puts severe pressure on the foreign exchange market and may result in the depletion of the external reserve. In this context, measures aimed at diversifying the production and export base, through incentives to promote exports of semi-manufactured and manufactured goods will help increase the foreign exchange earnings by the private sector. This will help reduce the demand pressure and ensure exchange rate stability.

5.4 Huge Debt Service payments

In the 1980s, the economy witnessed continued resort to external borrowing for the financing of domestic production in the wake of declining foreign exchange earnings occasioned by the glut in the international oil market. Payments arrears arising from the inability of the authorities to provide foreign exchange for imports accumulated. Consequently, the stock of debt increased to US$35.94 billion at end-December 2004 before the Paris Club deal in 2005 which reduced the stock to US$20.48 billion as at end-December 2005. The debt servicing was maintained at US$1.5 billion annually at about 50 per cent of the scheduled debt service resulting in huge deferred debt service payments (arrears) and penalty charges. The ratio of debt service payments to exports of goods and services officially put at 30 per cent from 1986 is considered high. In fact for the period 1986 through 2003, the actual debt service payments (due) to exports

of goods and non-factor services was above 60.0 per cent on the average. These payments put pressure on the foreign exchange market and the exchange rate. Currently the emphasis is on the London Club debt and promissory notes following the complete exit from the Paris Club of creditors. To ensure that we do not go back into debt crises and, thus, compromise the current stability in the foreign exchange market and exchange rate, external borrowing should be project-tied and such projects should be capable of paying back such borrowings when completed and operational.

5.5 High Arbitrage Premium

The existence of the parallel market has continued to foster speculative activities in the foreign exchange market. Throughout the 1990s, annual investigations by the regulatory authorities have revealed significant exchange rate premium between the official rate and the parallel market rate for the arbitrage gains. This served as a major incentive for operators to perpetrate their rent-seeking activities. For example, the parallel market premium was as high as 79.2 per cent in February 1992, compared with 35.5 per cent in 1991 and the internationally acceptable standard of 5.0 per cent. The high parallel market premium that emerged overtime resulted from the inadequate supply of official foreign exchange, before the introduction of the auctioning system, led to various abuses. These developments resulted in capital flights and enormous diversion of official foreign exchange to the parallel market, a practice known as "round tripping".

Efforts made by the CBN to unify the rates in 1992 and 1995 did not yield the desired result. However, with the introduction of the wholesale Dutch Auction System (WDAS) in February 2006 and the further liberalization of the foreign exchange market by allowing the bureaux de change access to official funds, the arbitrage premium has reduced to below the 5.0 per cent benchmark. In fact, exchange rates convergence was achieved for the first time in more than a decade. The major challenge is the ability to sustain the current level of arbitrage premium over time.

5. Concluding Remarks

Nigeria's exchange rate management has produced mixed results. While the initial overvaluation of the naira has been substantially eliminated, the resurgence of huge fiscal deficits has undermined the tight monetary policy stance of the CBN and engendered a state of persistent demand pressure on foreign exchange resources and thus, the exchange rate. The excess liquidity in the system has further compounded the problem. The problems of demand pressures and supply shortages which have caused persistent instability in the foreign exchange market are rightly being addressed by the further liberalization of the market through the wholesale DAS and the high level of external reserves which has restored confidence in the market and supported the CBN interventions.

Despite the successes achieved currently in exchange rate management and the relative stability sustained in the last two years, there is need for fiscal restraint and discipline at all levels of government and greater coordination and harmonisation of fiscal and monetary policy actions to ensure that injections of liquidity into the system are consistent with macroeconomic stability. In addition, there is need to create a truly autonomous inter-bank foreign exchange market whereby the CBN ceases to be the dominant player supplying foreign exchange to banks and other authorized dealers on a predictable, routine basis. Government financing should be through non- inflationary sources mainly through the non-bank sources.

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Figure 1:

Annualized Exchange Rate Movement (1985-2006) in various Market Segments

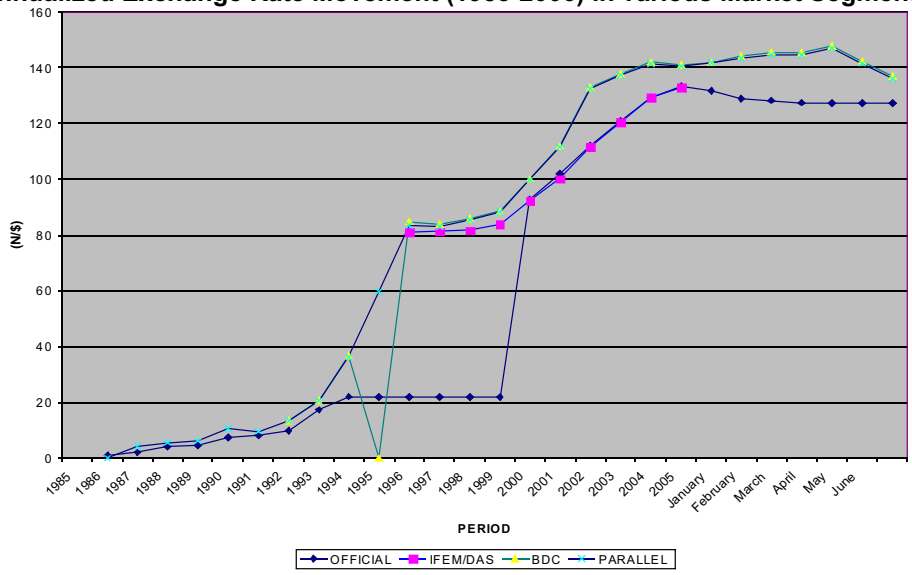

Figure 2:

Exchange Rate Volatility (1992-2005) Showing the fixed regime of 1994-1998

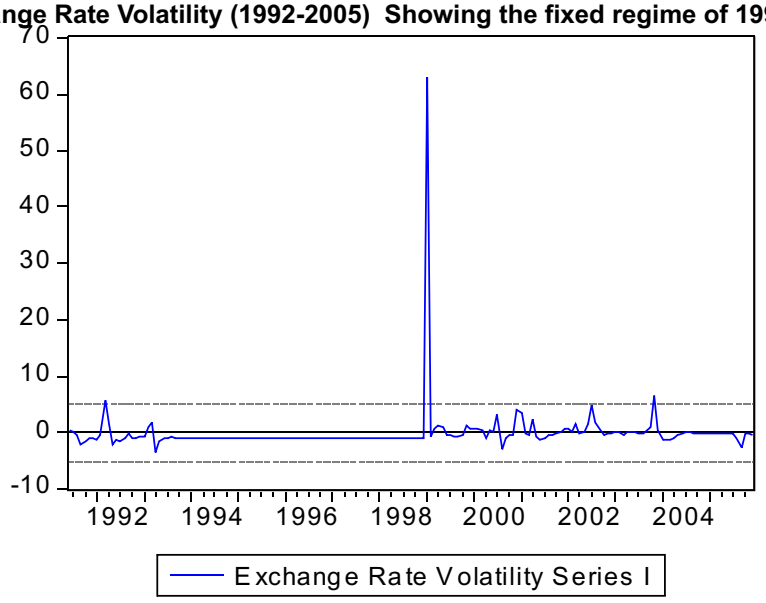

Figure 3: Exchange Rate Volatility (1992-2005) Under a Deregulated Regime

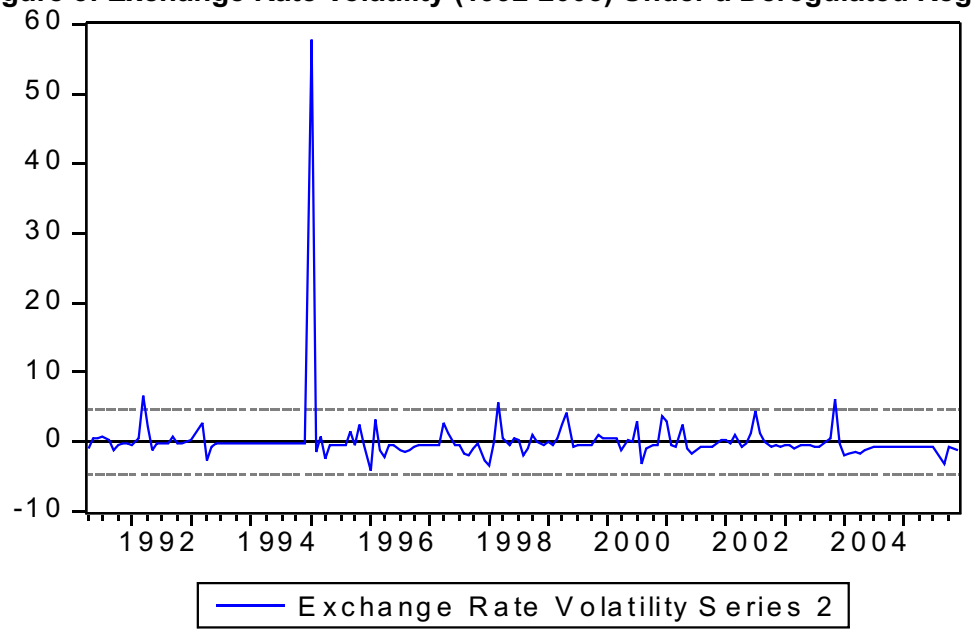

Figure 4: Movement in Exchange Rate and Macroeconomic Aggregates

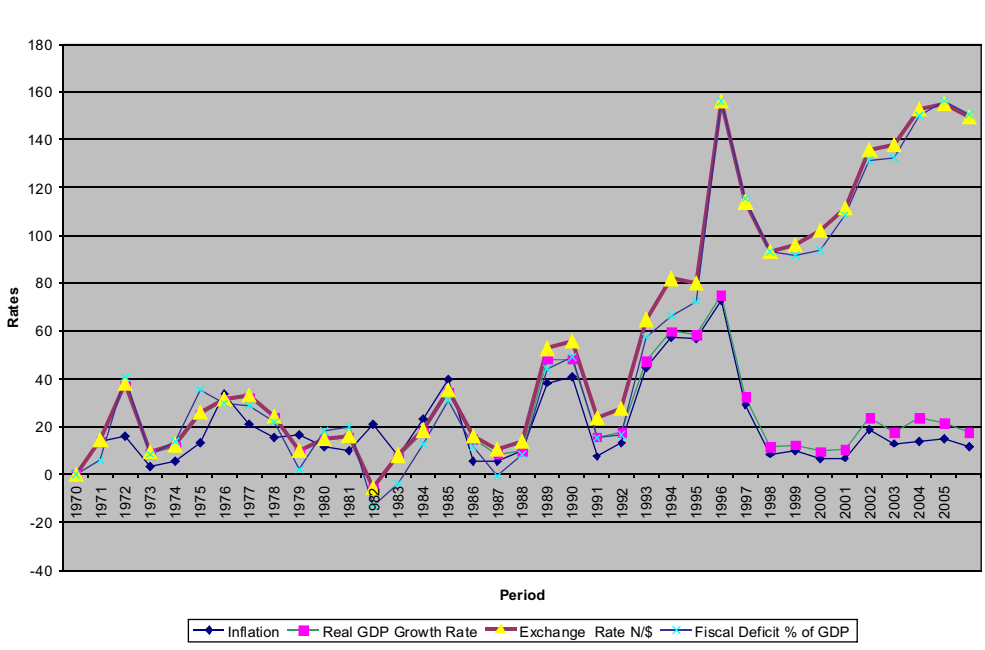

Table 1:
Schema of Events in Exchange Rate Management in Nigeria

	YEAR	EVENT	REMARK
1.	1959-1967	Fixed parity solely with the British pound sterling	Suspended in 1972
2.	1968-1972	Included the US dollar in the parity exchange	Aftermath of the 1967 devaluation of the pound and the emergence of a strong US dollar.
3.	1973	Revert to fixed parity with the British pounds	Devaluation of the US dollar
4.	1974	Parity to both pounds and US dollar	To minimize the effect of devaluation of the individual currency
5.	1978	Trade(import)-weighted basket of currency approach	Tied to 7 currencies – British pounds, US dollar, German mark, French franc, Japanese yen, Dutch guilder, Swiss franc
6.	1985	Referenced on the US dollar	To prevent arbitrage prevalent in the basket of currencies.
7.	1986	Adoption of the Second-tier Foreign Exchange Market (SFEM)	Deregulation of the economy
8.	1987	Merger of the first and second –tier markets	Merger of rates
9.	1988	Introduction of the inter-bank foreign exchange market (IFEM)	Merger between the autonomous and the FEM rates
10.	1994	Fixed exchange rate	Regulate the economy
11.	1995	Introduction of the Autonomous foreign exchange market (AFEM)	Guided- deregulation
12.	1999	Re -introduction of the inter-bank foreign exchange market (IFEM)	Merger of the dual exchange rate, following the abolition of the official exchange rate from January 1, 1999
13.	2002	Re-introduction of the Dutch Auction System (DAS)	Retail DAS was implemented at first instant with CBN selling to end-users through the authorized users (banks)
14.	2006	Introduction of Wholesale DAS	Further liberalized the market

* These avalanches of measures clearly reveal the instability of exchange rate management in Nigeria