

Exchange Rate Policy Design: Choosing the Right Exchange Rate Response in a Changing Environment

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I. Introduction

The exchange rate is an important macroeconomic policy instrument. Changes in exchange rates have powerful effects on tradables and non-tradables of the countries concerned through effects on relative prices of goods and services. Changes in nominal exchange rates most likely affect inflation rates. Because of the importance of exchange rates, policymakers in most countries worry about the behaviour of both nominal and real exchange rates and take active interest in their determination. Indeed, the choice of an exchange rate regime coupled with the 'right' level of the exchange rate tends to be, perhaps, the most critical decision in an open economy. This is because of the impact of the exchange rate on economic performance, resource allocation, the wealth of citizens, standard of living, income distribution, the balance of payments and other economic aggregates. Also, the choice of exchange rate policy very much determines the ability of a developing country, for example, to take full advantage of the international trade system. A wrong exchange rate policy can turn out to be very expensive. Historical factors, structural and economic characteristics of an economy, institutional factors as well as developments in the external environment are among the factors which condition a country's choice of an exchange rate regime from among the popular regimes of clean floating and firmly fixed exchange arrangements and the intermediate regimes of various sorts.

In the context of the various exchange rate regimes, this paper discusses the choice of exchange rate response in a changing environment, with a particular focus on Nigeria's exchange rate choices. To provide the conceptual framework, Section 2 focuses on the different types of exchange rate regimes and their features. In Section 3, we discuss the factors which condition the choice of exchange rate regimes by countries. Section 4 examines Nigeria's exchange rate response in a changing environment, in particular, the present environment of deregulation, with emphasis

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on monetary and price stability and, possibly, inflation targeting framework. The final section contains brief concluding remarks.

II. Conceptual Framework-Exchange Rate Regimes

Exchange rate regimes refer to exchange rate arrangements or systems by which the value of the home currency is determined vis-à-vis foreign currencies. Various forms of exchange rate regimes are open to individual countries. The options range from clean floating or flexible arrangements at one extreme to firmly fixed arrangements at the other extreme, with the remaining regimes falling in a continuum in between, as variants of the fixed exchange rate or floating rate. These include managed float, pegs, and target zones.

Fixed Exchange Rate Regimes

A fixed exchange rate system is one in which exchange rates are maintained at fixed levels. Each country has its currency fixed against another currency. It may seldom be changed (hard peg) or changed occasionally (adjustable peg). Nigeria maintained fixed exchange rates from the time of attainment of political independence in 1960 till the breakdown of the Bretton Woods monetary system in the early 1970s.

Two major reasons why fixed exchange rates are appealing:

- to promote orderliness in foreign exchange markets and
- certainty in international transactions. Developing countries for the most part in the past, have favoured a pegging arrangement in order to obtain medium-term advantages of greater certainty about the exchange rate faced by traders, especially in view of the greater importance of trade relative to capital flows in their balance of payments (Crockett, 1987: 87).

(a) Firmly Fixed Exchange Rate Regimes

These are also known as hard pegs. Once again, they tended to become increasingly popular in the aftermath of the East Asian financial crises.

Main argument in favour of a hard peg is the need to make monetary policy credible. It is contended that if you cannot build credibility for monetary policy at home, then you can presumably import it by fixing the value of your currency to a hard-money country (Velasco, 2000: 3). Related to this is the alleged ability of hard pegs to induce discipline, whether fiscal or monetary.

Three varieties of firmly fixed exchange rate regime are:

- currency boards
- dollarisation
- monetary union

(i) Dollarisation

In dollarisation, a country adopts as its own currency the currency of a “hegemon”, or dominant economy. This means that the currency of another country circulates in the country as the sole legal tender (formal dollarisation).

In 2000, Ecuador adopted the U.S dollar as its legal tender.

Adopting such a regime implies the complete surrender of the monetary authorities' independent control over domestic monetary policy

(ii) Monetary Union

In a monetary union, a group of well-integrated economies adopts a single currency and coordinate monetary policy. This means that the same legal tender is shared by the members of the Union.

The CFA Zone in Africa, for example, is made up of two currency unions, the West African Economic and Monetary Union (WAEMU) and the Central African Economic and Monetary Community (CAEMC), each with its own central bank that issues its own currency with a fixed parity to the euro.

Both currencies are called the CFA franc. But they are distinguishable and not freely interchangeable, except via the euro convertibility that is guaranteed by the French treasury, which holds at least 65 per cent of the pooled reserves of each area.

As in dollarisation, a monetary union implies the complete surrender of the monetary authorities' independent control over domestic monetary policy.

(iii) Currency Boards

These are monetary arrangements based on an explicit legislative commitment to exchange domestic currency for a specified foreign currency, at a fixed exchange rate, combined with restrictions on the issuing authority to ensure fulfillment of its legal obligation. This implies that domestic currency will be issued only against foreign exchange.

Essentially, a currency board combines three elements: a fixed exchange rate between a country's currency and an “anchor currency”, automatic convertibility, and a long-term commitment to the system, often made explicit in the central bank's law. Under a currency board arrangement, the central bank commits to exchanging a unit of domestic currency for a larger, more stable foreign currency at a fixed exchange rate as Argentina did with the U.S dollar from the late 1990s.

The arrangement requires that the domestic currency be issued only against foreign exchange and that it be fully backed by foreign assets. This leads to

the main reason for countries to consider a currency board, namely, to demonstrate that they are pursuing an anti-inflationary policy (Gulde, 1999: 37).

Modern currency boards have often been instituted to gain credibility following a period of high or hyper-inflation.

A currency board is credible only if a country's central bank holds sufficient official foreign exchange reserves to cover at least its entire monetary liabilities, thereby assuring financial markets and the public at large that every domestic currency note is backed by an equivalent amount of foreign currency in the official coffers.

And to be able to do this as well as have a successful peg requires, as Mishkin (2000: 354) has argued, an independent central bank, a sound financial system, and a strong fiscal position.

The notable advantages of a currency board are economic and monetary credibility, low inflation, low interest rates than would otherwise prevail, following from zero expectations of devaluation.

Also of note as strength of the currency board system is the virtual removal of the nominal exchange rate as a means of adjustment. But, according to Fischer (2001), this is also its major weakness, for adjustment to an external or internal shock via differential inflation is slower than via the nominal exchange rate.

In general, currency boards can prove limiting, especially for countries that have weak banking systems or are prone to economic shocks. With a currency board in place, the central bank can no longer serve as a lender of last resort for banks in trouble. This, however, can be compensated by the creation, typically with fiscal resources, of a banking sector stabilization fund.

Besides, with a currency board arrangement, it is not possible to use financial policies i.e., adjustments of domestic interest or exchange rates, - to stimulate the economy. Instead, economic adjustment can be achieved only through wage and price adjustments, which can be both slower and painful.

In other words, a currency board arrangement, featuring a stable exchange rate, entails the loss of power by the authorities to conduct independent monetary policy, control monetary aggregates and serve as a lender of last resort. This involves real economic costs in terms of unemployment, stagnant output and low demand that may result as was the case in Argentina.

In sum, as Velasco (2000) has observed, the essence of a currency board is that it limits the ability of the authorities to extend domestic credit. This may be good for preventing inflation, but it can be bad for bank stability.

(b) Other Conventional Fixed Peg Arrangements

Also known as currency peg. In this case, the country (formally or de facto)

pegs its currency at a fixed rate to another currency or a basket of currencies.

Single Currency Peg

The local currency may be pegged to that of a dominant trading partner. But most pegging countries tend to peg to the U.S dollar, being the major currency in international finance and it is an easy and simple standard for people to understand.

Pegging to a single currency may yield a number of advantages:

- Reduction in exchange rate fluctuation between the focus country and the country to which it is pegged. This facilitates trade and capital flows between the two countries, particularly as uncertainties associated with changes in exchange rates are reduced.
- Confidence in the developing country's currency may be enhanced if the country whose currency is being used for the peg is regarded as following economic policies conducive to stable prices. In this case, in order for the pegging country to maintain the level of the peg, it must also follow policies which will maintain stable prices.

Drawbacks of a single currency peg.

- Where the local currency is pegged to a floating currency, e.g. the US dollar, the local currency will float along with the dollar vis-à-vis other currencies. This means movement of the value of the pegged currency along with that of the dollar whether or not that movement is appropriate for the economy concerned.
- Movements in the exchange rate in relation to the currencies of the other countries may interfere with domestic policy (macroeconomic) objectives.

Pegging to a Basket of Currencies

In an attempt to stabilize its effective exchange rate, the developing country may peg its currency to a basket of currencies where the basket is formed from the currencies of major trading or financial partners and weights reflect the geographical distribution of trade, services or capital flows.

There is no commitment to keep the exchange rate irrevocably fixed. The exchange rate may fluctuate within narrow margins of less than ± 1 per cent around a central rate or the maximum and minimum value of the exchange rate may remain within a narrow margin of 2 per cent for at least 3 months.

The monetary authority stands ready to maintain the fixed parity through direct intervention (i.e., via sale/purchase of foreign exchange in the market) or indirect intervention (e.g., via aggressive use of interest rate policy, imposition of foreign exchange regulations, exercise of moral suasion that

constrains foreign exchange activity, etc).

Often, pegging to a basket entails the weighted average of several currencies, the resulting exchange rate being total trade-weighted, export-weighted or import-weighted.

Advantages

The country that pegs to a basket may be able to avoid large fluctuations in its exchange rate with respect to several trading partners' currencies. As a result, it is able to stabilize its nominal effective exchange rate.

The system results in the reduction of price instability which arises from exchange rate changes.

Some Disadvantages

Technical difficulties of implementing a peg which would in general change on a daily basis vis-à-vis all of the industrial countries (Barth, 1992: 38).

A basketweighted exchange rate which, by definition, moves against all major currencies, might reduce confidence on the part of foreign investors and reduce capital inflows.

The determination of the exchange rate without reference to the domestic policies of the pegging authorities is a notable limitation.

In general, flexibility of monetary policy, though limited under the fixed peg arrangements, is greater than in the case of exchange arrangements with no separate legal tender and currency boards because traditional central banking functions are still possible, and the monetary authority can adjust the exchange rate.

(c) Crawling Peg

A middle course exchange rate arrangement between fixed and flexible exchange rates. It is appropriate for countries that have significant inflation compared with their trading partners, as had often been the case in Latin America.

The monetary authorities fix the exchange rate on any day but periodically adjust it in small amounts at a fixed rate or in response to changes in selective quantitative indicators such as past inflation differentials vis-à-vis major trading partners, the differential between the inflation target and expected inflation in major trading partners, etc.

The rate of crawl can be set to generate inflation adjusted changes in the exchange rate (backward looking), or set at a pre-announced fixed rate and/or

below the projected inflation differentials (forward looking).

Advantage of this type of peg is that it combines the flexibility needed to accommodate different trends in inflation rates between countries while maintaining relative certainty about future exchange rates relevant to exporters and importers.

One disadvantage is that the crawling peg leaves the currency open to speculative attack because the government is committed on any one day or over a period to a particular value of the exchange rate.

Another is that maintaining a crawling peg imposes constraints on monetary policy in a manner similar to a fixed exchange peg system.

Exchange rates can, however, operate within crawling bands. In this case, the currency is maintained within certain fluctuation margins of at least ± 1 per cent around a central rate or the margin between the maximum and minimum value of the exchange rate exceeds 2 per cent and the central rate or margins are adjusted periodically at a fixed rate or in response to the changes in selective quantitative indicators.

The degree of exchange rate flexibility is a function of the bandwidth. Bands are either symmetric around a crawling central parity or widen gradually with an asymmetric choice of the crawl of upper and lower bands (there may be no pre-announced central rate in the latter case).

However, constraints are imposed on monetary policy, given the commitment to maintain the exchange rate within the band. The degree of policy independence is a function of the bandwidth.

(d) Target Zone

Related to the above. It is another compromise between floating rates and fixed but adjustable rates, and is a popular regime.

Under it, a central rate that can be fixed, crawling or flexible is surrounded by a band within which the central rate is permitted to float.

This regime allows for flexibility among a country's policy objectives. It is also said to prevent extreme movements in the exchange rate.

Note: most of the above regimes fall into the category of adjustable peg exchange rates a system in which a national currency is pegged to a key currency, e.g., U.S dollar, but the level of the peg could be changed occasionally, albeit within a narrow band.

Floating Exchange Rate Regimes

A freely floating exchange rate system or flexible exchange rate system is one

in which the exchange rate, at any time, is determined by the interaction of the market forces of supply of and demand for foreign exchange.

- The exchange rate so determined by the market may change from day today or even minute to minute.

In the light of this, the system, in principle, allows a more continuous adjustment of the exchange rate to shifts in the demand for and supply of foreign exchange and, hence, avoids the difficulty of determining the appropriate level of the rate as is the case under a fixed exchange rate system or a basket peg.

Thus, the basic case for flexible exchange rates is that if prices move slowly, it is faster and less costly to move the nominal exchange rate in response to a shock that requires an adjustment in the real exchange rate.

- The alternative is to wait until excess demand in the goods and labour markets pushes nominal goods prices down. That process is likely to be painful and protracted.

The degree of flexibility of the exchange rate depends on the nature of government intervention.

- A **clean float** or independent float results where the government does not intervene in exchange rate determination to establish its level. Any official foreign exchange market intervention is aimed at moderating the rate of change and preventing undue fluctuations in the exchange rate.
- A **managed float** results where the government intervenes in the foreign exchange market in order to manipulate the exchange rate to a desired rate.
- However, the monetary authority may also attempt to influence the exchange rate without having a specific exchange rate path or target. Indicators for managing the rate are broadly judgmental (i.e. balance of payment position, international reserves, parallel market development), and adjustments may not be automatic. Besides, intervention may be direct or indirect.

The managed float approximates what obtains in reality. The clean float is academic as it does not exist in the real world. Even the industrialized countries practice floating with different degrees of government intervention. Even the United States the cleanest of the floaters intervenes in the foreign exchange market occasionally in light of the implication of high volatility of clean floats.

Thus, one question relating to floating is not whether to float freely, but what kind of 'dirty float' to have. Should there be a monitoring band? Some countries seem to have this in practice.

Unlike a fixed exchange rate system which results in changes in the level of foreign exchange reserves and the monetary base, a floating exchange rate system equilibrates the demand for and supply of foreign exchange by changing the exchange rate rather than the level of reserves.

- And because the monetary base is not affected by foreign exchange flows under a flexible exchange rate system, a country has the freedom to pursue its own monetary policy without having to be concerned about balance of payments effects.
- And so, external imbalances would be reflected in exchange rate movements under a floating rate system instead of reserve movements, with monetary implications under a fixed rates system (Barth, 1993: 38).

However, some concerns about floating exchange rates have been expressed:

- That repeated depreciations only cause inflation without real effects. However, exchange rate flexibility, if properly managed can be stabilizing.
- Increased variability in exchange rates may have adverse consequences for capital inflows, particularly if foreign investors also are concerned that exchange rate flexibility may reduce a country's willingness to follow restrained domestic monetary policies.
- Presence of foreign debt may contribute to financial fragility.

For success, though, a flexible exchange rate system requires complementary policies which can take different forms: counter-cyclical fiscal policy, prudential regulation, capital controls, etc.

And in a managed float, the authorities should be able to intervene if the exchange rate “strays too far” from the perceived medium term equilibrium.

III. Important Factors in the Choice of an Exchange Rate Regime

The Factors

The choice of an exchange rate regime is subject to considerations that are both economic and political and involve current conditions as well as expected future development and development strategies.

A country's stage of development, its economic structure and its institutional features are important considerations in determining the choice of an exchange rate regime. Historical factors also play a role.

In general, a number of characteristics and factors to consider are as follows:

- Structure of production and export reliance on primary commodity production and exports (minerals and agricultural crops) in relation to manufactured exports. The former is more subject to external shocks

- than the latter.
- Source and nature of economic shocks and the authorities reactions to such shocks
 - State of development of financial markets.
 - Openness of the economy and its integration with the global economy
 - Dependence on the external sector for essential imports, particularly intermediate goods and capital equipment
 - The extent of substitutability of domestically produced goods for imports
 - Significance of capital flows, including foreign direct investment and official and private lending.
 - Options that exist in terms of monetary unions with trading partners
 - The monetary authorities' preferred approach to disinflation.
- A few of these factors are elaborated upon as follows:

i. Openness

In the context of the theory of optimum currency areas, fixed exchange rates have been recommended for small open economies open to international trade.

- It is generally considered that a small, open economy may find it more advantageous to peg to the exchange rate of a much larger trading partner.
- And if it chooses to peg, its economic structures would need to be aligned with those of the anchor area and its labour market should be flexible. This is because pegs put more onus on wages and prices.

On the other hand, large economies, or small economies subjected to shocks uncorrelated to those buffeting the country to whose currency they might have pegged were advised to choose flexible exchange rates.

- Corker, Beumont, Elkan and Lakova (2000) report that Poland's exchange rate flexibility is in keeping with its relatively large size, lower degree of openness, and its less flexible labour market.
- However, a number of small open economies have been reported to have had successful experiences with exchange rate flexibility; often coupled with inflation targeting, e.g., Australia, Chile, Colombia, Israel, New Zealand, Sweden (Velasco, 2000: 8).

ii. Economic Shocks

Where the country is buffeted by large real shocks from abroad, the case for adoption of flexible exchange rates is often very strong. If shocks to the goods market are more prevalent than shocks to the money market, then it may be

much more desirable to have a flexible exchange rate compared to a fixed exchange rate.

If shocks buffeting an economy are significantly large (technically, if their variance exceeds some threshold), then fixing the exchange rate is not welfare improving.

In contrast, if the inflation bias that occurs under discretionary monetary policy is large enough, then flexible exchange rate system is not welfare enhancing.

Generally, foreign real variability is likely to be particularly large for exporters of primary products and/or countries highly indebted abroad. In the face of the shocks, particularly negative output and price shocks, greater variability is required to allow the nominal exchange rate to play its role to facilitate the shift to a new internal and external equilibrium.

- In other words, the nominal exchange rate should move to adjust relative prices to the new equilibrium level, after a shock has rendered the old array of relative prices obsolete.
- If prices move slowly, it is faster and less costly to move the nominal exchange rate in response to a shock that requires adjustment in the real exchange rate.

Finally, even in some small countries that may be more subject to asymmetric shocks, such as changes in exchange rate regimes and in countries lacking product diversity, a decline in terms of trade, the authorities may need more flexibility to deal with the shocks (Cordon, 2001: 45).

iii. State of Development of Financial Markets

Rudimentary and underdeveloped financial markets make it difficult to operate a floating exchange rate.

- Major industrial countries have allowed their currencies to float, taking cognizance of the highly developed state of their financial markets and the difficulties that would arise if they attempted to maintain a given exchange rate in the face of substantial short-term capital flows.

In the presence of underdeveloped financial markets, with a limited number of foreign exchange dealers, countries may adopt pegs of various forms in the early phases of market development.

- Currency union or hard pegs to a strong currency could be adopted as a way to develop the financial markets through integration.
- Indeed, underdeveloped financial markets and extreme lumpiness of foreign exchange earnings (especially aid inflows and earnings from

dominant export commodities, e.g. oil in Nigeria) provide good reasons to manage floats more tightly than in the more developed and diversified economies.

Thus, in the context of developing countries, particularly the poor ones, a further deepening of financial markets might make it easier to operate flexible exchange rates.

In general, there are, at least, three conditions for the successful management of a flexible exchange rate, in terms of delivering low and stable inflation at the same time as the exchange rate works as a real shock absorber. They are:

- existence of a foreign exchange market with some minimum depth and efficiency
- a domestic anchor for monetary policy
- minimum independence and capability of the central bank in order to be able to deliver an effective monetary policy.

iv. Importance of Capital Flows

In the context of open capital accounts of the balance of payments, a flexible exchange rate policy is indispensable. Capital controls liberalisation aids capital inflows which put pressure on the exchange rate. Uncertainty from a flexible exchange rate system may discourage short term capital inflows while market participants are made to bear exchange risk instead of the balance sheet of the central bank bearing it.

Under a fixed exchange rate regime, capital inflows will, in the absence of sterilization, either because it is costly or ineffective, put downward pressure on interest rates and upward pressure on the money supply thereby potentially conflicting with inflation objectives.

- But a degree of exchange rate flexibility would raise the exchange risk premium, helping to dampen interest sensitive, and often destabilizing capital flows.

Economies open to international capital flows have been and are in the process of moving away from adjustable peg exchange rate system, some towards harder pegs, but more towards systems with greater flexibility (Fischer, 2001). The reason, it is argued, is that soft pegs have not proved viable over any lengthy period, especially for countries integrated or integrating into the international capital markets.

In Czech Republic and Poland, changes from more or less controlled exchange rate regimes occurred largely under pressure of capital flows.

- While the Czech Republic was forced to abandon its exchange rate band under extreme market pressure, Poland widened its band and

later abandoned fluctuation bands in stages in the context of persistently large inflows of capital (Corker, Beumont, Elkan and Iakova (2000: 6).

In the same way, the experiences of Mexico and East Asian countries during their financial crises in the 1990s illustrate the risks of open capital accounts in the face of less flexible exchange rates. Short-term debt proved to be dangerous in the case of Mexico. It has also proven to be risky in the case of East Asia.

However, a flexible exchange rate system may be highly volatile with many consequences.

- In the light of this, managed floats, in combination with prudential capital controls, can do much to prevent large swings in capital flows, thus making an important contribution to macroeconomic stability.
- Even then, recent experience has shown that managed floats are vulnerable to large accumulations of short-term external investment (UNCTAD, 1998).
- It is therefore necessary to introduce occasional flexibility by widening the exchange rate band. This could help to eliminate one-way bets and discourage arbitrage outflows.

Pre-Requisites for Adopting Firmly Fixed Exchange Rate Regimes

Just like in the case of flexible exchange rates, there are a number of conditions underpinning the adoption of hard pegs.

- Satisfaction of optimum currency criteria. This means that small countries are better candidates than large countries. Also, pegging to a country subject to very asymmetric real shocks is likely to create problems.
- The bulk of the trade of the country adopting the peg takes place with the country or countries to whose currencies it plans to peg.
- Preferences about inflation of the pegging country must be broadly similar to those of the country to which it plans to peg.
- Flexible labour markets are crucial. This is because with the exchange rate fixed, nominal wages and prices must adjust in response to an adverse shock.
- As a hard peg prevents the central bank from serving as a lender of last resort to domestic banks, strong, well-capitalized and well-regulated banks are indispensable.
- For countries with weak central banks and chaotic fiscal institutions, hard pegs are very necessary. But in opting for a hard peg, the

government must adhere to its own set of rules governing monetary policy. Laws cannot be changed by fiat.

In the light of the foregoing, it is clear that there is no single correct time-independent answer that can be given on the choice of an exchange rate regime. Historical factors along with institutional factors and the economic characteristics of the economy play important roles.

- The domestic policy orientation as well as the degree of the integration of the local economy are also important factors in choosing any of the intermediate exchange rate regimes between the polar arrangements of firmly fixed exchange rates and clean floating.

IV. Nigeria's Exchange Rate Response in a Changing Environment

The evolution of Nigeria's exchange rate policy/regimes has reflected the changing environments of regulation of economic activities/administrative control, oil boom, deregulation/structural adjustment programmes and, currently, the focus on greater liberalization.

Evolution of Exchange Rate Policy

During the period of exchange control that prevailed up to 1986, ad hoc administrative measures were applied.

- The exchange rate regime operated from the late 1950s up to 1973 was generally in consonance with the IMF par value system.
- The Nigerian currency, not being a traded currency, had its exchange rate largely subjected to administrative management.
- The currency maintained a fixed parity with the pound sterling up to 1967 and U.S dollar up to 1970. Thus, the exchange rate policy was largely passive as it was dictated by the fortunes or otherwise of the U.S dollar or British pound sterling (Obadan, 1993:3).
- Following the breakdown of the Bretton Woods monetary system and the emergence of a system of generalized floating from 1973, Nigeria decided from April, 1974 to implement an adjustable peg exchange rate system in which the naira was to be managed independently of the U.S dollar and other currencies, although it was pegged to them through administrative action.
- Effective from February, 1978 the naira was pegged to a system of import-weighted basket of currencies of seven major trading partners of Nigeria.
- Against the backdrop of oil boom, the nominal exchange rate appreciated every year in the 1970s excepting 1976 and 1977. The

bilateral and real effective exchange rates also appreciated in the 1970s (Obadan, 1994).

In the first half of the 1980s, the domestic environment for policy making was greatly affected by the crash of prices in the international crude oil market earlier in 1981 and the resultant shortfall in foreign exchange earnings coupled with the emergence of serious balance of payments and external debt crises. This paved the way for the monetary authorities to embark on a policy of gradual depreciation of the naira nominal exchange rate.

But the administrative depreciation of the naira did not prove capable of removing the perceived over-valuation of the currency. Some measures of the real effective exchange rate still showed significant average real appreciation during the 1981-85 period.

Consequently, the second-tier foreign exchange market (SFEM) was introduced on September 26, 1986 within the framework of the structural adjustment programme (SAP).

Thus, from 1986 till the present day, the SAP philosophy of liberalisation and deregulation has provided the framework for operating a managed float exchange rate regime in Nigeria.

In Nigeria and some other developing countries, the primary factors leading to the adoption of the market based foreign exchange arrangement were the perception that the previous administrative system for allocating foreign exchange had broken down and that the market-system would lead to a more efficient allocation, including more effective provision of foreign exchange for critical inputs.

The evolution of a realistic exchange rate was thus a key expectation from the new exchange rate regime.

Nigeria has used a composite of both inter-bank and auction system to manage the exchange rate. The objective of both, however, is to establish an exchange rate that will move flexibly to equilibrate demand for and supply of foreign exchange and, thus, reduce dependence on exchange and trade restrictions.

The Medium-term Outlook of Exchange Rate Management

As at now, Nigeria is one of the many developing countries that operate a managed floating system. It is not clear if this is in the context of a clearly pre-determined path for the exchange rate.

Perhaps, in the bid of the monetary authorities to maintain relative exchange rate stability, Nigeria is reported to have successfully operated a ± 3 per cent fluctuation band in 2005 within the framework of its managed float (Gudmundson, 2007: 7)

Two policy environments that have been created/are being created and which are consistent with a floating exchange rate regime are capital account liberalisation and inflation targeting framework.

Inflation Targeting

From January 2009, a new environment/framework for exchange rate policy is to be introduced, namely, inflation targeting. This intention was made known on August 14, 2007 by the Governor of the Central Bank of Nigeria when he unveiled the “Strategic Agenda for the Naira”. The CBN would use the period before the effective implementation date to prepare for it in view of the technicalities involved.

Discussing the right exchange rate regime for Nigeria has to be in the context of the monetary policy framework and other factors.

Under a floating regime, a major task of the monetary authorities is to find and implement a suitable monetary policy anchor as the exchange rate is no longer available for this purpose.

The choices for nominal anchor boil down to two, namely, monetary aggregates or inflation targeting.

- In monetary aggregate anchor, the monetary authorities use their instruments to achieve a target growth rate for a monetary aggregate, such as reserve money, broad money supply or narrow money supply. The targeted aggregate becomes the nominal anchor or intermediate target for monetary policy
- Inflation targeting involves the public announcement of medium-term numerical targets for inflation with an institutional commitment by the monetary authority to achieve the targets.
- The framework has the important features of increased communication with the public and the markets about the plans and objectives of monetary policy makers and increased accountability of the central bank for attaining its inflation objectives.
- In inflation targeting framework, exchange rate movements are automatically taken into account to the extent that they are expected to affect future inflation. Accordingly, this will generally produce a pattern of monetary tightening when the exchange rate depreciates.

Compared to monetary aggregates as anchor, inflation targeting has turned out to be most popular among emerging market economies for a number of reasons (Velasco, 2000: 11):

- Given the instability of money demand in most economies, targeting monetary aggregates is neither theoretically optimal nor easy to

handle in practice.

- Inflation targets may also prevent the time inconsistency problem that leads to an inflation bias, while avoiding the pitfalls of fixed exchange rates.
- Inflation targets may also have some of the attributes of hard pegs, in particular, transparency and observability.

And, in principle, inflation targets can deliver less inflation volatility than a monetary policy centred on a monetary or exchange rate targets (Corker, et al, 2000). In practice, however, this may not be so because:

- any discretionary policy is open to political pressures;
- the technical requirements to forecast inflation and understand the lags in the response of the economy to changes in monetary policy instruments can be considerable;
- further complications arise where the country has to dismantle all capital controls

Nevertheless, inflation targeting can be successful where:

- there is freedom from commitment to another nominal anchor like the exchange rate or wages;
- there is ability to carry out a substantially independent monetary policy, especially one not constrained by fiscal considerations

In the light of the CBN Act (2007) which urges the Bank to ensure monetary and price stability, it has given an indication that over the medium term, low and stable inflation will be the primary long-term goal of monetary policy in Nigeria.

Capital Account Liberalisation

The second major policy framework to consider in discussing the right exchange rate for Nigeria over the medium term is the status of capital account liberalisation.

- Nigeria's capital account is largely liberalized and relatively open, and this is consistent with a floating exchange rate regime of some sort.
- Over time, particularly since the 1990s, there has been a systematic reduction of restrictions on capital flows into the economy with the following measures, among others (CBN Annual Report, Dec. 2006).
 - ✓ foreign investors are allowed to invest in government bonds and securities of not less than one year maturity, subject to the issuance of a certificate of capital importation (CCI) by the processing bank;
 - ✓ foreign investors are allowed to invest directly in equity as well as in the capital market through a broker but are to obtain a CCI as evidence of such

investment. In all these, the investor is guaranteed unrestricted repatriation of proceeds;

- ✓ Foreign investors are allowed to extend loans to private Nigerian entities without restrictions. However, such loans are without government guarantee.
- ✓ With effect from March 2006, Nigerian residents are allowed to invest in foreign currency-denominated securities subject to repatriation of the proceeds from such investment;
- ✓ Holders of both ordinary and export proceeds domiciliary accounts are guaranteed unrestricted access to the use of their funds.
 - Thus, as at 2006, the following capital and financial account transactions have been liberalized: capital transfers, direct investment and other investment. Portfolio investment is partially liberalized, the only restriction being the prudential requirement that investment in money market securities must be for a maturity period of at least one year.

A Hybrid Approach

In the light of the above policy frameworks, the fact that the Nigerian economy, as an oil dependent economy, is subject to possible severe shocks, a freely floating exchange rate would be suggestive.

- But given the nature of Nigeria's foreign exchange market which is dominated by the central bank, in terms of supply of foreign exchange, and considering the pass-through effects of exchange rate on inflation, there is the need to continuously manage the exchange rate.
- Also, for sometime now, the exchange rate has achieved some stability. Given the public's fixation on this, coupled with the exchange rate's importance politically, the Central Bank would need to lead the market in line with changes in economic fundamentals.

Specifically, one possible solution to the issue of avoiding too much and little exchange rate variability is to adopt a hybrid approach whereby weight is given to both inflation and the exchange rate.

- In this direction, formal or informal bands for the exchange rate, assuming they are not too narrow, could provide additional reassurances that the authorities will avoid potentially large swings in the exchange rate that would be inconsistent with the goals of low inflation and external sustainability.
- In other words, in the context of a managed float, there should be an understanding (as there may already be, given the path of the naira

over the last few years) that the CBN will lead the naira through gradual changes in line with economic fundamentals, while resisting unwarranted volatility.

- And under the inflation targeting framework, intervention in the foreign exchange market will be necessary to smoothen excessive volatility in the exchange rate.

V. Conclusion

This paper has briefly examined the evolution of exchange rate policy in Nigeria and dwelt on the exchange rate outlook over the medium - term against the background of the policy frameworks of capital account liberalization and inflation targeting. Before then, the various types of exchange rate regime were reviewed and the conclusion is reached that the choice of any particular regime depends on many factors. These factors include the structure and features of the economy, the external environment it faces including the nature and sources of shocks, stage of development of the financial markets, openness of the economy and significance of capital flows, institutional and historical factors. The domestic policy environment is also important. There is no single correct time independent answer to the question of choice of exchange rate regime.

Over the medium-term in Nigeria, and in the light of the prevailing/proposed policy frameworks of capital account liberalisation and inflation targeting coupled with the fact of the country's high vulnerability to external shocks through heavy dependence on crude oil exports, a freely fluctuating exchange rate regime is suggestive. However, this is not a desirable option considering other factors. Therefore, there is the need for the continuous management of Nigeria's floating exchange rate regime. In this direction, a hybrid approach may be adopted whereby weight is given to both inflation and exchange rate in policy calculations. To this end, formal or informal bands for the floating exchange rate may need to be adopted. This could prevent large swings in the exchange rate which would be inconsistent with the goals of low inflation and external sustainability.

References

- Barth, R. (1992), "Exchange Rate Policy". In: IMF Institute, Macroeconomic Adjustment: Policy Instruments and Issues (Washington, D. C: IMF)
- Beaumont, C and Li Cui (2007), "Conquering Fear of Floating Australia's Successful Adaptation to a Flexible Exchange Rate". IMF Discussion Paper PDP/07/2.
- Central Bank of Nigeria (2002). Seminar on Issues in Foreign Exchange Rate Management in Nigeria. (Lagos: CBN Training Centre)
- Central Bank of Nigeria (2006), Central Bank of Nigeria Annual Report for the Year Ended 31st December, 2006.
- Chami, S, T. Schneider, F. Ahmed and N. B. Ltaifa (2007), "Yemen: Exchange Rate Policy in the Face of Dwindling Oil Exports". IMF Working Paper, WP/07/05.
- Cordon, W. X (2001), "Cordon Says Developing Countries' Choice Vary According to Specific Economic Circumstance". IMF Survey, Vol. 30, No.3, February.
- Corker, R; C. Beaumont; R. van Elkan, and D. Iakova (2006), "Exchange Rate Regimes in Selected Advanced Transition Economies Coping with Transition, Capital Inflows, and EU Accession". IMF Discussion Paper, PDP/00/3.
- Crockett, A. (1987) "Exchange Rate Policy". In: EDI, National Economic Policy Making: The Key Elements (Washington, D. C.: The World Bank).
- Fischer, S (2001), "Exchange Rate Regimes: Is Bipolar View Correct?". A Lecture Delivered at the Meetings of the American Economic Association, New Orleans, January 6.
- Gudmundson, M (2007). "The Choice and Design of Exchange Rate Regimes". Bank for International Settlements. www.bis.org/events/cbcd06h.pdf. Web access: 17/09/07.
- Gulde, Anne-Marie (1999), "Currency Board in Bulgaria's Stabilization", Finance and Development, Vol. 36, No. 3, September.

- IMF (2004), "Classification of Exchange Rate Arrangements and Monetary Policy Frameworks", June 30.
www.imf.org/external/np/mfd/er/2004/eng/0604. Web access: 17/09/07
- Mills, C. A and Nallari, R. (1993), Analytical Approaches to Stabilization and Adjustment Programs. An EDI Seminar Paper No. 44 (Washington, D. C: The World Bank and IBRD).
- Mishkin, F. S (2000), "Mishkin Weighs Merits of Monetary Options in Developed and Emerging Market Economies". IMF Survey, Vol. 29, No. 1, November.
- Obadan M. I. (1994), Real Exchange Rates in Nigeria. A Preliminary Study. NCEMA Monograph Series, No. 6 (Ibadan: NCEMA)
- Obadan M. I. (2002), "Exchange Rate Mechanism Under the West African Monetary Zone", Central Bank of Nigeria Economic and Financial Review, Vol. 40, No. 4, December.
- Obadan, M. I. (1993), Nigeria's Exchange Rate Policy and Management. NCEMA Monograph Series, No. 5 (Ibadan, NCEMA)
- Velasco, A. (2000), "Exchange Rate Policies for Developing Countries: What Have We Learned? What Do We Still Not Know? G-24 Discussion Paper Series. (New York and Geneva: United Nations)