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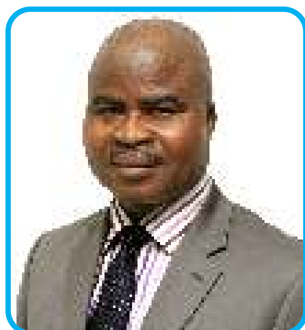
FOREIGN EXCHANGE MANAGEMENT: NIGERIA'S EXPERIENCE WITH THE UNHOLY TRINITY



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1.0 INTRODUCTION

Foreign exchange management is a major component of monetary policy in many central banks in developing and emerging market economies. This is because maintaining price stability is a key mandate of many central banks in ensuring overall macroeconomic stability. Other components of macroeconomic policy are fiscal policy, prices and incomes policy, as well as growth and development policy. From the literature, the basic macroeconomic policy objectives usually include promoting a high rate of growth of real output; maintaining a low and stable rate of inflation; ensuring a low level of unemployment; and promoting balance of payments equilibrium (Ojo, 2013).

As may be expected, the objectives of monetary policy may vary from country to country. These objectives are often contained in the laws establishing the central bank. Thus, while some central banks pursue a single objective, others pursue multiple objectives. In the developing countries, central banks are usually saddled with multiple objectives. In Nigeria, the major objectives of monetary policy include the attainment of price stability, sustainable economic growth and employment, and achieving external balance. In pursuing these objectives, the CBN recognizes the existence of conflicts among objectives, necessitating some sort of trade-offs. The pursuits of multiple objectives are difficult to manage, because they sometimes complicate policy design and are often the source of policy slippages. At times, concerns over the exchange rate or the level of credit take precedence over price stability considerations. It is for this reason that the conduct of monetary policy in many developing countries experience episodes of excessive accommodation or tightening which could contribute to inflation and output volatility. As observed by IMF (2015), while these challenges may be present in all central banks, they are particularly common in some developing countries that do not have a clear framework for the conduct of monetary policy. Thus, where such conflicts and multiple objectives exist, monetary policy becomes more effective using a combination of standard and unconventional monetary policy instruments.

The main target of Monetary Policy is price stability, while Fiscal Policy is aimed at accomplishing the other objectives of macroeconomic policy. The focus of monetary policy essentially derives from the mandate of the monetary authority, which may vary but usually informed by the laws establishing the central bank of the country. While some central banks pursue a single objective, others pursue multiple objectives.

Aside maintaining price stability, some central banks like the Central Bank of Nigeria, are saddled with the responsibility of issuing legal tender currency, maintain external reserves to safeguard the value of the currency, promote a sound financial system and provide economic and financial advice to the Federal Government.

Exchange rate policy is very important to achieve positive external balance and external reserves with the ultimate goal of macroeconomic stability. An effective exchange rate policy compliments the objectives of monetary policy. In recent times, therehave been extensive discussions and debates on the appropriate and most effective exchange rate policy for Nigeria. The debates derive from the fact that exchange rate volatility have severe consequences on output, inflation and some other components of aggregate demand. All these have a direct impact on the welfare of the ordinary man especially in an import dependent economy like that of Nigeria.

To put our discussions in context, we observe that, the relationship between monetary policy and the exchange rate can be explained in three different channels namely; income channel, price channel and interest rate channel. According to the Income channel, an expansionary monetary policy characterized by an increase in money supply and an increase in domestic gross domestic product will subsequently lead to an increase in imports of goods and services to the country, thereby causing exchange rate depreciation (See Figure 1). A contractionary monetary policy on the other hand is vice-versa.

In explaining the relationship between monetary policy and exchange rate through the price channel, an increase in money supply is reflected in an increased demand of goods and services leading to an increase in price of domestic goods and decrease in exports, which causes currency depreciation (Figure 2). The exact opposite occurs when there is a decrease in money supply.

Furthermore, on the interest rate channel of the relationship between monetary policy and exchange rate, an increase in domestic interest rates will attract inflows to the economy leading to an increase in the balance of payment position and subsequently an exchange rate appreciation (Figure 3). However, the reverse occurs when there is a decrease in domestic interest rates.

Figure 1: Monetary Policy and Exchange Rate (Income Channel – Expansionary Monetary Policy)

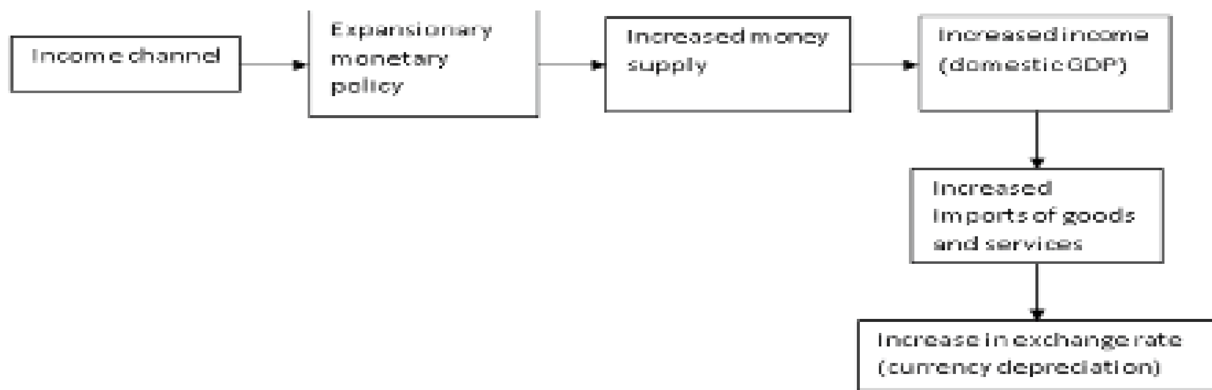


Figure 2: Monetary Policy and Exchange Rate (Price Channel)

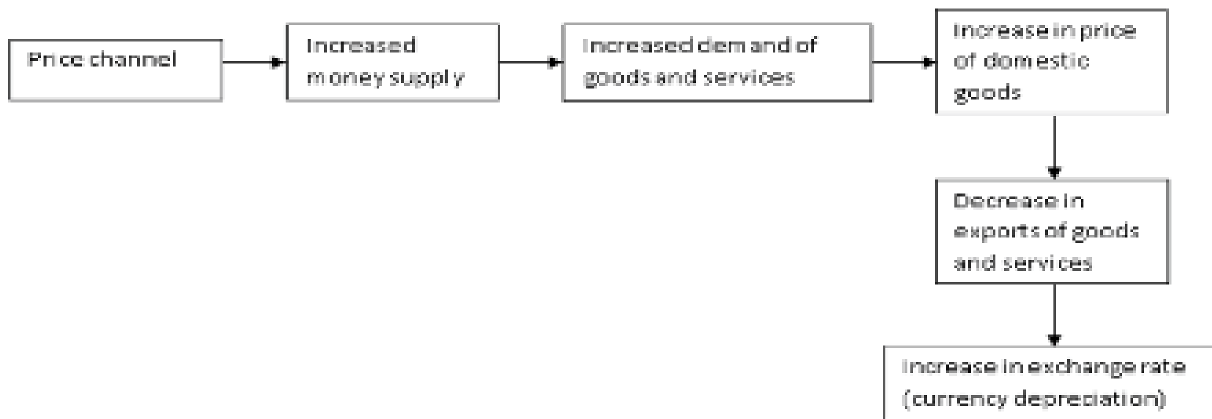


Figure 3: Monetary Policy and Exchange Rate (Interest Rate Channel)

2.0 Appraisal of the Exchange Rate Management Regime

Foreign Exchange Rate Management is classified majorly into two : namely; the fixed and flexible regimes, while the managed float regime exists in between. In a flexible exchange rate regime, forces of demand and supply largely determine the exchange rate, while a fixed exchange rate regime is one where a domestic currency is anchored to a precious metal or another currency. A managed floating exchange rate is a regime where the domestic currency is allowed to float although the monetary authority (usually the central bank) regularly intervenes in the foreign exchange market to stabilize the rate around a predetermined path or band. Table 1 shows the exchange rate regimes adopted in Nigeria over the years.

Figure 1: Monetary Policy and Exchange Rate (Income Channel – Expansionary Monetary Policy)

Period	Regime	Remark
1958 - 1972	Fixed Parity with British Pound Sterling	Nigerian Pound in Fixed Parity with GBP, Administered ER
1973 - Sept. 1986	Exchange Control	The Naira was fixed to a basket of currencies (in 1973), Import licensing & prescription of eligible transactions, FX rationing and administered ER
Sept. 1986 - July 1987	Dual Exchange Rate System	1st Tier/Official: fixed rate, 2nd Tier/Market: FX rate by Dutch auction system, Spurious and multiple biding by economic agents
July 1987 - 1988	Unified / Autonomous ER System	1st and 2nd tier merged - unified rate, Banks transacted among themselves, Demand pressures; depreciation of the naira
1989	Inter-Bank FX Market	CBN - major supplier, Demand pressures, BDCs licensed
March 5, 1992 - 1994	Deregulated Exchange Rate System	FX rate was floated, Parallel market premium narrowed
1994	Fixed Exchange Rate System	FX Allocation Committee was set up, Allocation by Pro-rata, Parallel premium widened
1994 - 1998	Re-introduction of Dual Exchange Rate Regime	Official rate for government; AFEM others, market forces; BDCs allowed to trade in autonomous funds; Exchange Control Act of 1962 and the Enterprises Promotion Decree of 1989 were abrogated
Jan 1999 - July 2002	Re-introduction of InterBank FX Market System	Daily trading, CBN intervened as a buyer/seller, Demand pressures
Aug. 2002 - Jan. 2006	Retail Dutch Auction System (RDAS)	Trades: twice a week (Monday and Wednesday), Bids: customer-based, Unutilized balance: repurchased by the CBN
Feb. 2006 - Dec. 2008	Wholesale Dutch Auction System (WDAS	Auction conducted twice a week, Banks buy on own account & sold to customers, Funds were transferable among banks, Unutilized balance was sold to the CBN
Feb. 2009 - July 2009	RDAS	Partial suspension of trading at the inter-bank, Sale of FX to BDCs suspended, Oil companies and MDAs mandated to sell to the CBN, Demand pressures moderated by end Q2 2009
July 2009 - Oct. 2013	WDAS	Oil companies free to sell at the interbank, Demand pressures moderated further by end Q4 2009, FX Forwards introduced, March 2011 with 1-, 2-, 3- month tenors
Oct. 2013 - Feb. 2015	RDAS	Authorized dealers could sell FX to BDCs at prevailing interbank rate, and margin not exceeding 1.0 per cent, FX borrowing by banks: limited to 75.0% of shareholders' funds, New capital requirements for BDCs: N35.0 million; cautionary deposit of N35.0mn; and multiple ownership of BDCs banned, Guidelines for Int'l Money transfer services introduced, 41 items for imports excluded from the FX market
Feb. 2015 - 14 June, 2016	Interbank FX Market	RDAS / WDAS windows closed, CBN intervention in the market when necessary only, FX sales trade based
15 June, 2016 - Date	Flexible FX Rate Regime	The ER to be determined by the forces demand and supply, Introduction of the Investors' and Exporters' (I&E) FX window.

The fixed exchange rate regime was the mechanism for foreign exchange management in Nigeria in the period 1959 – 1973. The policy was in line with the Bretton Woods system. However, the domestic currency was pegged to a basket of currencies during the period 1974 – 1985. Owing to several dynamics including institutional changes and market developments, the flexible exchange rate regime became effective in 1986 with the introduction of the structural adjustment programme (SAP). The Naira was liberalized and market forces were allowed to determine the direction of economy. However, the liberalization of the foreign exchange market had some challenges in the years after, thus necessitating some re-adjustments and reforms. The need for reforms in the foreign exchange market led to the adoption of a managed float exchange rate regime which divided the market into three segments namely, the official market (through the whole and retail Dutch auction systems), interbank market and Bureau de change. In this period, authorized dealers were allowed to purchase foreign exchange from the Central Bank of Nigeria through a competitive bidding process.

In addition, , a more flexible exchange rate system came into effect in June 2016 in order to move the market away from the sticky exchange rate around ?197.00/US$ to a more market determined rate. The Nigerian external sector became weakened due to external shocks in the third quarter of 2014 following the sharp decline of over 70 per in the price of crude oil, which contributes the largest share to foreign Earnings of Government. This was in addition to the general slowdown in global growth and geopolitical tensions along critical trading blocks in the world. For Nigeria, the slump in global oil prices slowed the economy further, as it receded with a negative 2.24 per cent slump in Gross Domestic Product (GDP) in the third quarter of 2016. Nigeria's GDP in the second quarter of 2016, declined by -2.06 percent (year-on-year) in real terms compared with the growth rate of 0.36 per cent in the previous quarter(NBS, 2016)

Consequently, the managed exchange rate regime was no longer suitable to contain the volatility in the exchange. Thus, the emphasis shifted to how the central bank can fine-tune its strategy to stabilize the exchange rate and steer the country out of recession. The new foreign exchange regime operates as a unified inter-bank system having two main segments – the interbank and the autonomous segments. The participants in this market include the CBN, FMDQ, foreign exchange primary dealers (FXPDs), nonFXPDs, corporate treasuries, and end users.

Thus, beginning from February 2017 to date, the CBN took series of actions to boost liquidity, accommodate all FX obligations and deepen the foreign exchange market in order to allow for price discovery. Some of the actions taken include:

1. Provision of funding for Invisible transactions for a fair and veritable exchange rate
   - PTA/BTA (24 hours), school fees and medical bills (48 hours)

   Enforcement: utilisation report and market intelligence
   Buying and selling in all banks' branches with the rates displayed

2. Secondary Market Intervention Sales (SMIS)
   - Intervention in various sectors of the market through forward sales of tenors from between 7 days

3. Sale of foreign exchange to Bureau-de-change
   - US$20,000 twice weekly to BDCs

4. Payment for Small-scale Importation
   - SMEs : US$20,000/quarter via telegraphic transfer for eligible transactions
   - Form 'Q' easier documentation process
   - Banks expected to send utilisation report
   - Erring banks sanctioned and disqualified from all FX transactions with the Bank

5. Establishment of Investors' and Exporters' Window
   - Invisibles obligations, bills for collection and other trade-related
   - At the NAFEX, portfolio Investors and exporters sell their proceeds to the banks for onward sale to buyers, e.g. exporters
   - The CBN is a market participant at the window.

In terms of outcome and feedbacks from the markets, it was agreed that, the steps taken by the CBN enjoyed a remarkable success. For instance, the Bank cleared all outstanding foreign exchange demand of about $4.14 billion in June 2016. In addition, the practice of front-loading of foreign exchange demand and inventory disappeared. This development significantly improved business judgment and planning. More so, the import substitution and expenditure switching measures (including the exclusion of 41 items from the CBN foreign exchange window) had positive effects on domestic production, being a motivation for increased

production in the non-oil sector and reduction of imports. In addition, the existence of 'fair' rates by the various users based on demand and supply led to appreciation in the BDC segment (from N480/US$ to N390/US$), thus, reducing the arbitrage premium.

3.0 The Unholy Trinity

3.1 The Macroeconomic Trilemma

The whole idea of the macroeconomic trilemma seeks answers to whether the central bank can control inflation, reduce interest rates and stabilize the exchange rate, simultaneously. From theory, we know that monetary policy even when aimed primarily at stabilizing key prices (consumer price, exchange rate and interest rate) can be challenging, requiring difficult trade-offs. For the trilemma doctrine, the substance is that "Monetary policy makers would like to achieve all three goals simultaneously if it were so simple but, there are challenges. Economists generally refer to the difficulty with pursuing the three goals simultaneously as the 'Macroeconomic Trilemma'. This problem was formalised in the economic literature by some economists led by Mundel (1963) and Flemming (1962).

The macroeconomic trilemma, also called the "impossible Trinity" represents to the classical challenge for monetary policy involving an attempt to control inflation (monetary policy independence), interest rate (perfect capital mobility), and exchange rate (fixed exchange rate policy). According to the proponents, a central bank cannot simultaneously maintain the three goals of free capital flows, a fixed exchange rate and an independent monetary policy.

A central bank can reach only two out of the three highly desirable policy objectives at any point. A number of economies opt for corner solution, that is either they give up fixed exchange rate in order to run an open economy, or have a fixed exchange rate and forgo an independent monetary policy. Policy direction towards achieving all three objectives have often led to crisis as experienced in Russia, Mexico and Argentina (Puckelwald, 2012). Thus, three possible policy options are at the disposal of the monetary authorities. Countries in the Euro Area have chosen free capital mobility and fixed exchange rates, but no monetary policy independence because the ECB is responsible for setting the monetary policy for the countries in the zone (Chang, 2000; Krugman, 1999). The US on the other hand have adopted free capital mobility and an independent monetary policy but has to trade off exchange rate, hence the US has a flexible exchange rate purely determined by the open market. Lastly, some other countries have chosen the option to pursue a fixed exchange rate regime with monetary policy independence, which implies the existence of capital controls as practiced by China.

3.2 Nigeria Monetary Policy: Stylized Facts

The CBN is mandated to stabilize the three key macro- prices – low and stable consumer prices, low and stable interest rate and a stable naira exchange rate. This has remained challenging as ever. Until 1974, the CBN implemented an exchange rate-based monetary policy framework. Following the collapse of the gold standard by 1974, exchange rate targeting (monetary policy tied to a foreign currency) was no longer fashionable, hence, CBN moved on to the target monetary aggregates.

Monetary targeting is based on the conviction that the supply of money can be reasonably controlled by the central bank through an operating target to then influence consumer prices and domestic output. The choice of the operating target (i.e. reserve money/base money) is founded on the principle of fractional reserve banking. The central bank uses its instruments like open market operation (OMO), cash reserve requirement (CRR), and discount window operations, to influence the stock of money, which then determine the path of inflation, economic growth, and other macro-aggregates The CBN has used this approach since 1974 and refined it in 2006 with the introduction of a largely signaling tool, the monetary policy Rate (MPR), under a new monetary policy implementation framework. The figure 4 illustrates the relationship between foreign exchange rate and lending rate in Nigeria.

Foreign exchange and lending rates remained stable during the period of exchange rate targeting in 1959 – 1974, but trended upwards in the period of monetary targeting with an MPR as anchor in 1974 – 2007. The introduction of the MPR as anchor and closure of the WDAS/RDAS in the period from 2008 to date led to a stable exchange rate, but prime lending rate trended upwards.

During the period of fixed exchange rate regime, the trade balance (capital and current), particularly the capital & financial account balance was near zero (See Figure 5).

Figure 4: Performance of Macroeconomic Fundamentals

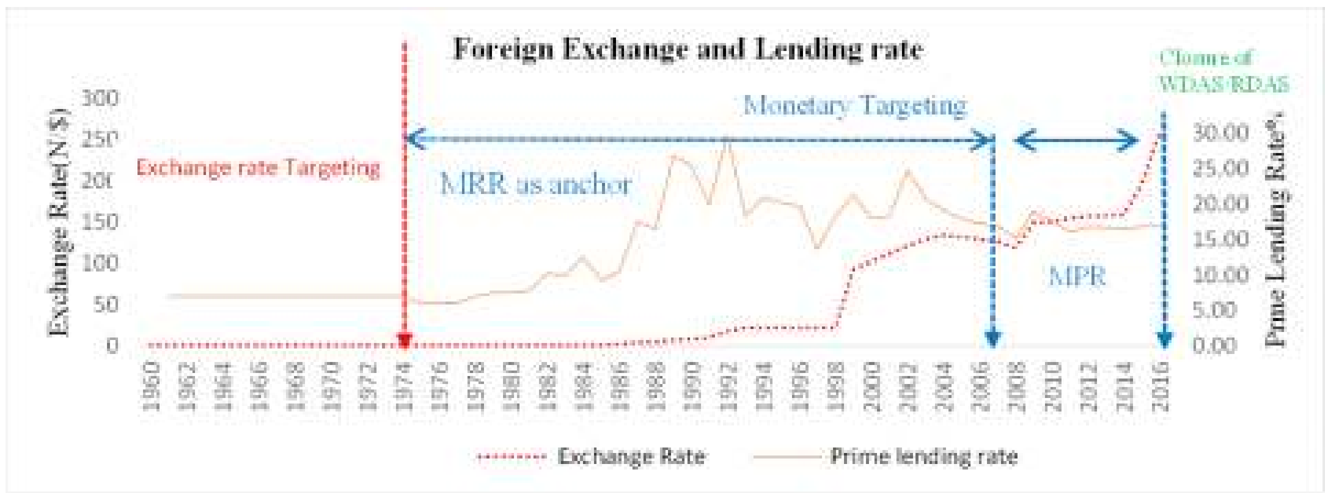


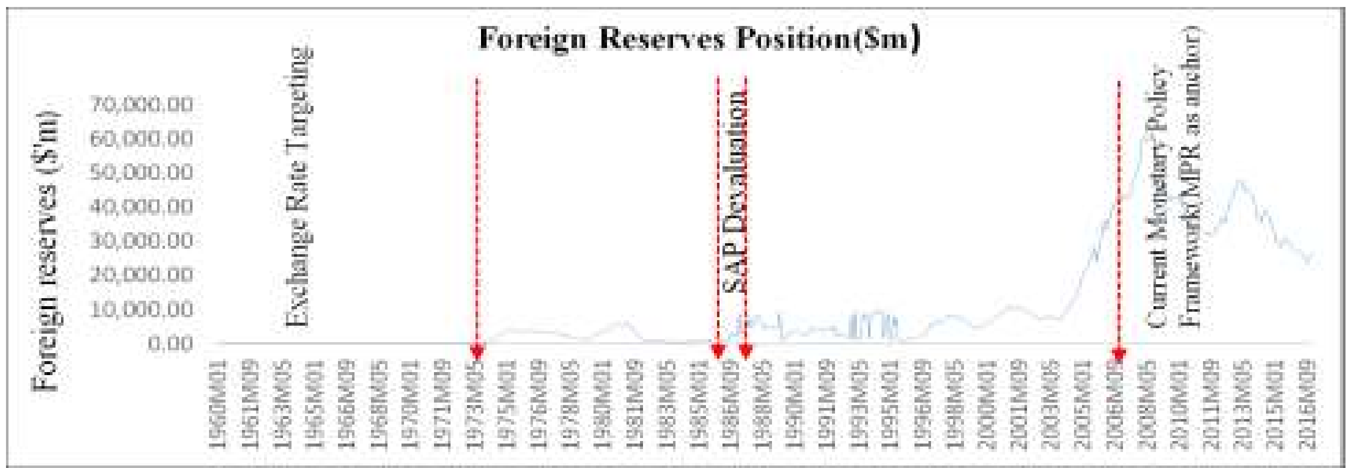
Figure 5: Capital and Financial Account, Current Account

(a) Capital and Financial Account

(b) Current Account

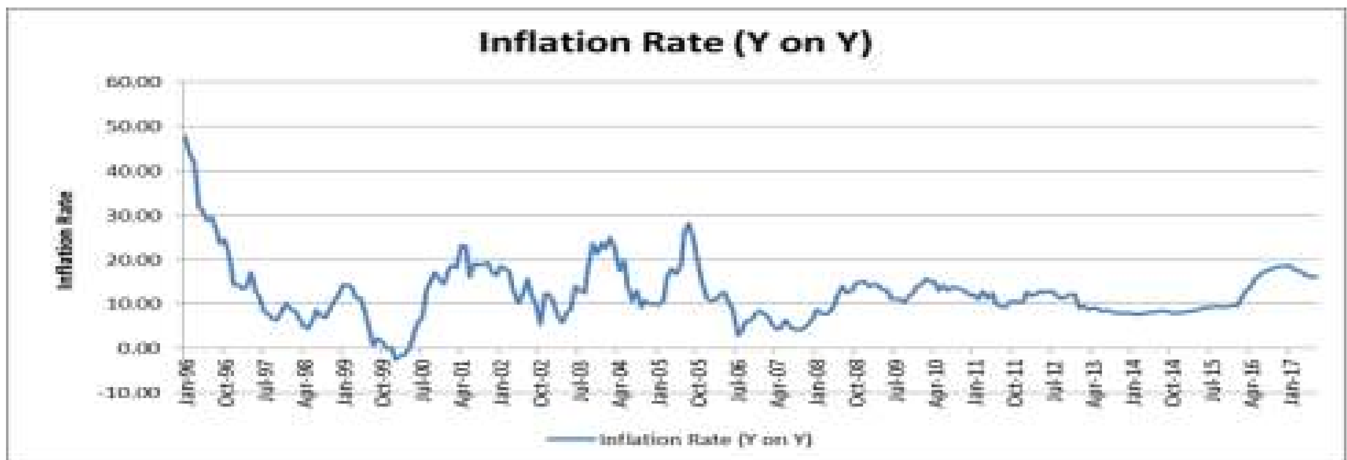
The external reserves was low and stagnant, but with the introduction of monetary targeting, and in particular with MPR as the anchor rate, both the reserves and current account balance became more robust, while the capital account entered deeper into deficit (See Figure 6).

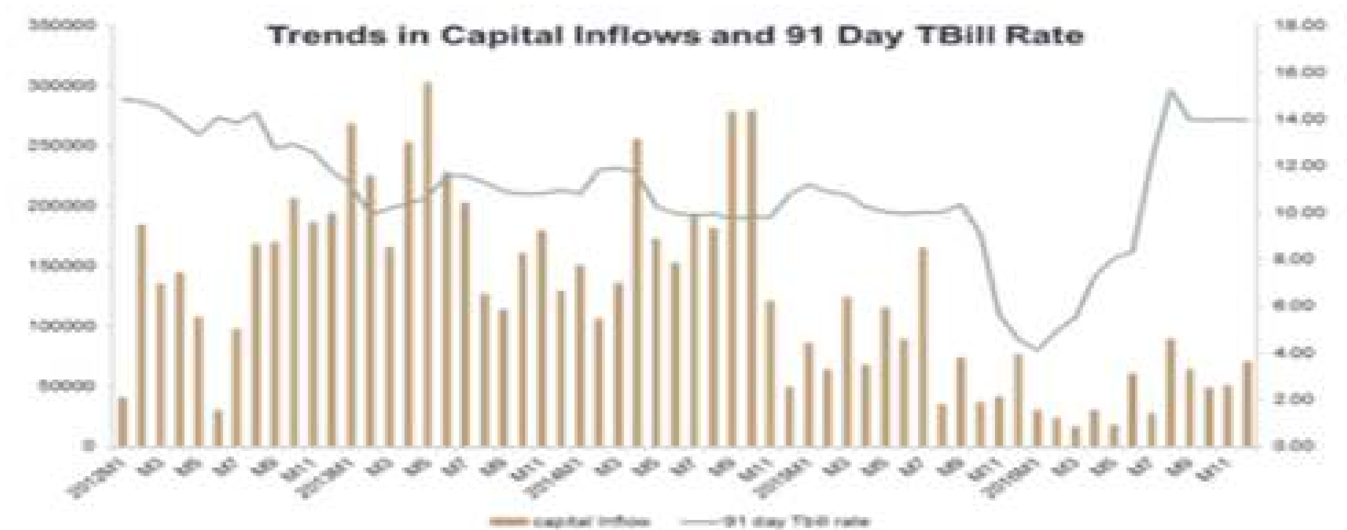
Figure 6: Foreign Reserves Position.

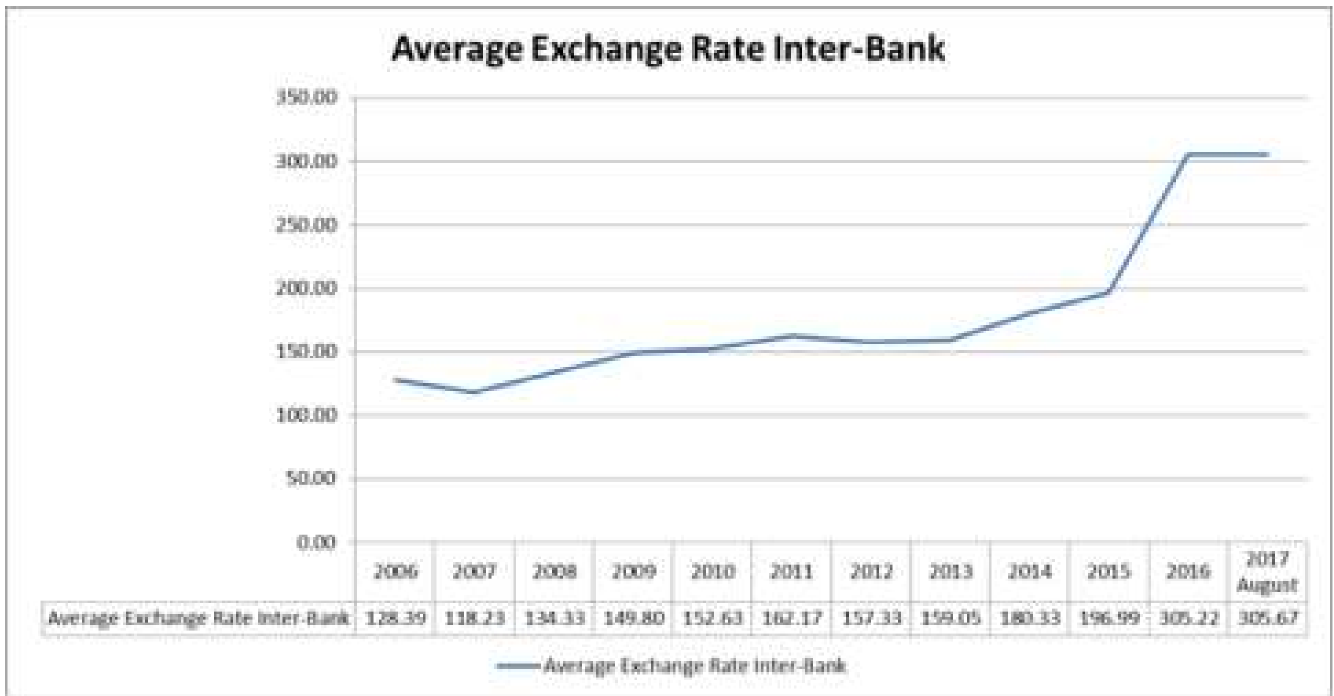


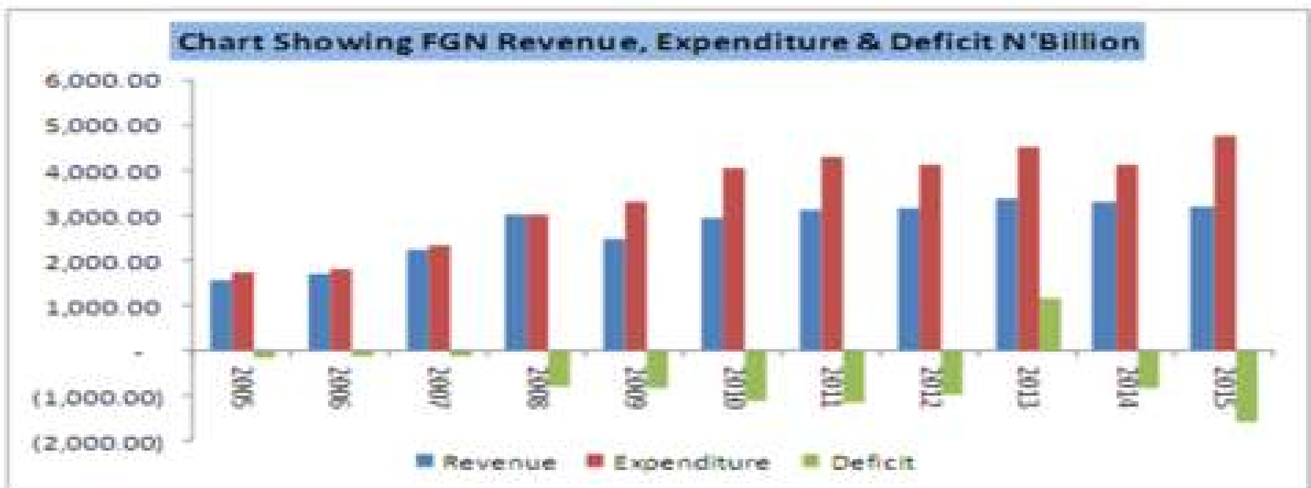
3.3 Trends in inflation, GDP, Capital Inflows and Fiscal Operations

Nigeria's Inflation was one of the highest in the world, around 48 per cent (year-on-year) in the 1990s. However, it moderated with the introduction of MPR and the implicit targeting of inflation at the lower and upper bands of 6.0 and 9.0 percent. Inflation remained stable, until February 2016 when the economy entered the period of stagflation and recession in 2016 partly accounted for by global surge in commodity prices, which affected the revenue from oil. This also affected the exchange rate and the reserves, given the pressure on the country's reserves as it was becoming increasingly difficult to defend the naira (Figure 7).



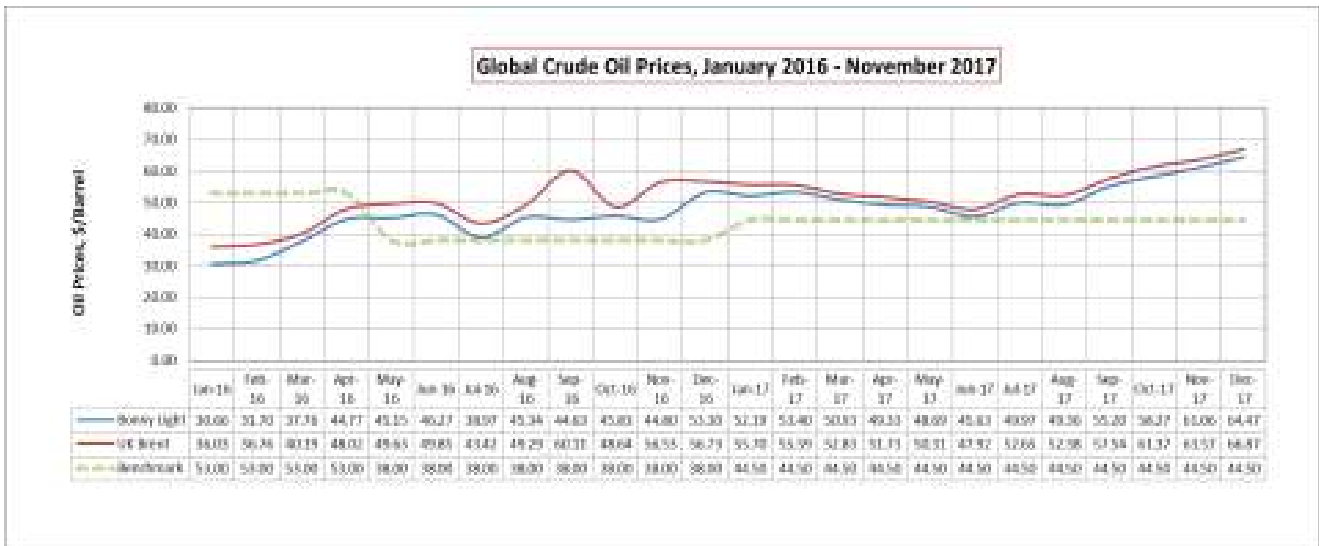


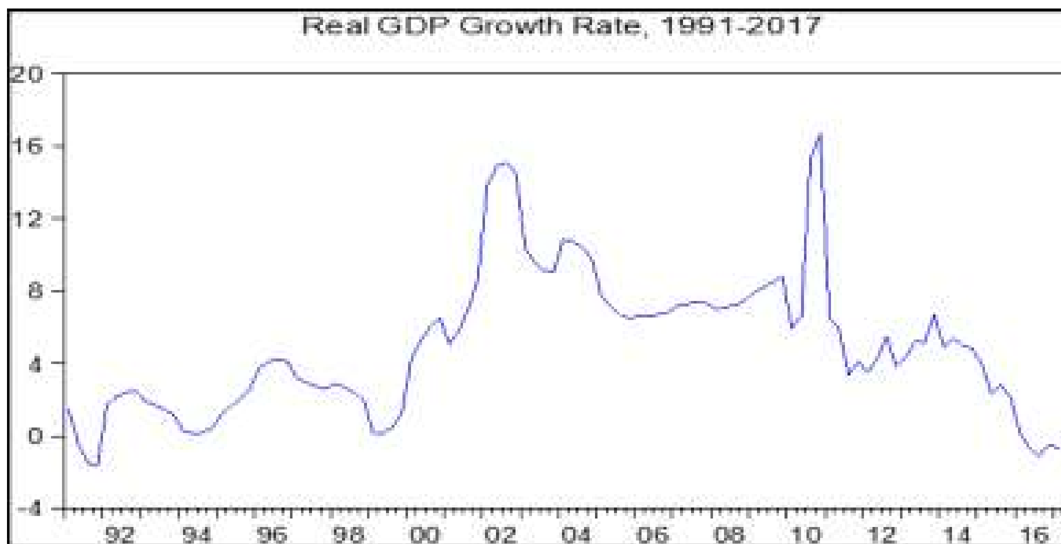




Internal and external Shocks – global economic and financial crisis, oil price decline, high energy costs, militancy, etc., leading to stagflation and eventual recession in 2016 (See Figure 8).

Figure 8: Real GDP and Crude Oil Price





3.4 Navigating the Policy Trilemma

Dealing with the policy trilemma remains a major challenge for monetary policy in Nigeria just like in other jurisdictions. More so, as in recent times, key parameters are out of their long term trends leading to stagflation and recession, thereby further complicating the macroeconomic trilemma. Likewise, increased international financial integration further complicates the monetary policy environment. Yet, the society (the Public) demands and expects the CBN to deliver all 3 goals: control inflation, reduce interest rate and stabilize the exchange rate, simultaneously.

How feasible is a corner solution in the case of Nigeria? This entails at least one of three evils! Float the exchange rate, on the other hand, loose monetary policy independence, or establish capital controls? According to Krugman (1999), "the point is that you can't have it all: A country must pick two out of three even though none of the options is optimal. A country can fix its exchange rate but only by maintaining controls on capital flows (like China today). It can choose to leave capital movement free but retain monetary autonomy, but only by letting the exchange rate fluctuate (like Britain – or Canada); or choose to leave capital free and stabilize the currency, but only by abandoning any ability to adjust interest rates to fight inflation or recession (like Argentina)". Different situation calls for some innovation since none is exactly optimal. Therefore, CBN monetary policy adopts what may be termed 'a middle of the road solution' by giving up some flexibility on all three goals for macroeconomic stability, allowing the exchange rate to be largely market determined but the Bank intervenes to reduce volatility. Capital account is slightly open- investors can come into the equity and debt markets but with limits on the quantum of money that can be taken out. Hence, some monetary policy independence is lost.

4.0 Recent Policy Actions by the CBN and outcomes

Interest Rate Policy:

- MPC raised rate from 12 to 14 percent in 2016. Policy rate has been held at that level since then to maintain a 'tight monetary policy" stance. Objective is to anchor inflation expectations; reduce domestic demand to slow widening Current Account Deficit (CAD) and reverse the flow of capital out of the country.
- However, because of recession rate was not aggressively raised - consequently, inflation remains high, but not increasing.
- Capital inflows is very slow but current account has turned slightly positive.

Exchange Rate Policy:

- Managed float to maintain stability in exchange rate; Currency allowed to move in line with market forces but Central Bank intervenes to avoid excessive volatility. Some reforms are ongoing to sustain stability of the naira exchange rate – I & E window, NAFEX, etc.
- Capital flow needed to finance current account deficit.
- Capital flows needed to be properly managed on account of global uncertainty.
- Stable naira exchange rate is important for both inflation and capital inflow. Exchange rate pass-through to consumer prices.

Figure 9: Growth and Inflation Balance

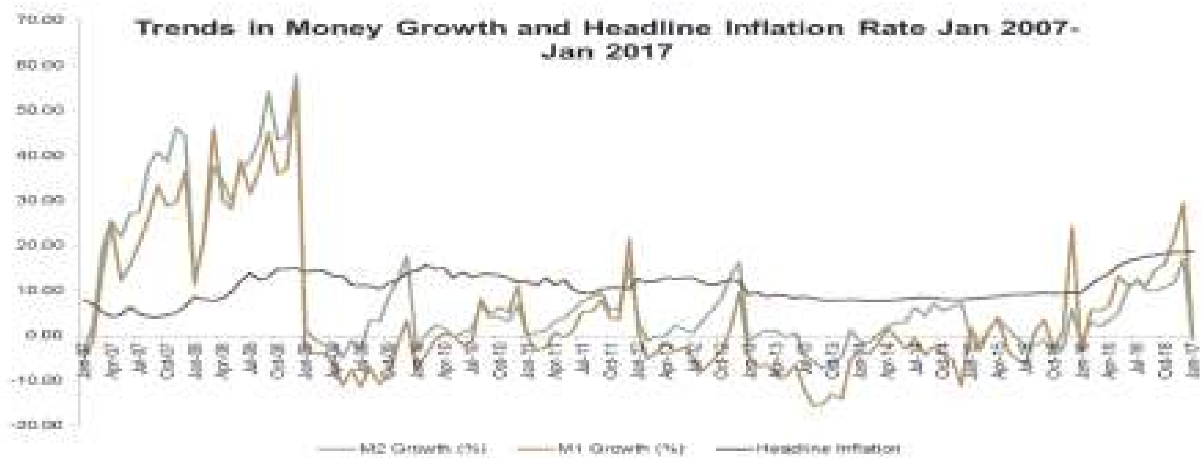
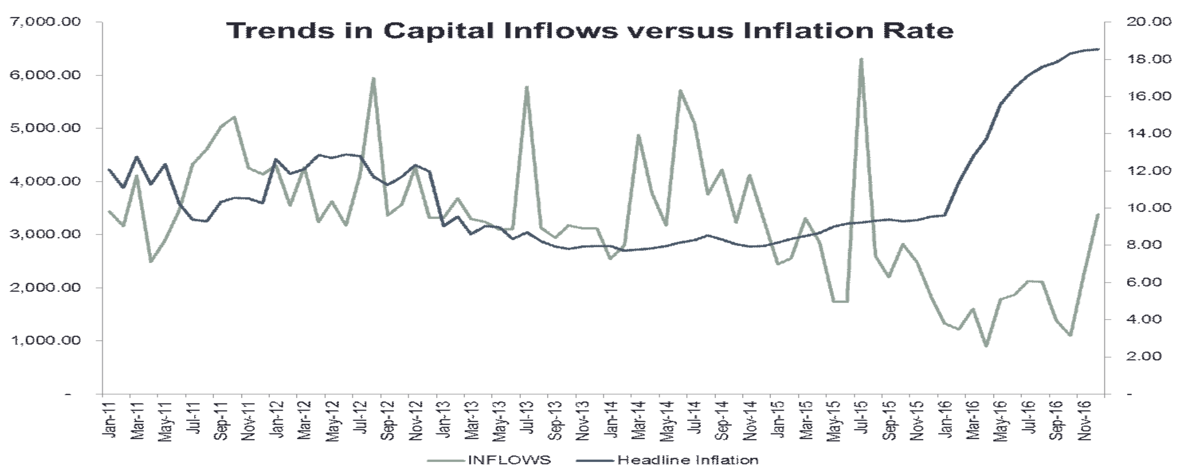


Figure 10: Capital Inflows versus Inflation Rate



4.1 Managing the Growth and Inflation Balance

Inflation hurts the poor and increases poverty, while increasing growth reduces poverty. High Interest rate affects inflation by reducing domestic demand. It is worthy of note that higher growth is possible only with price stability. An increase in interest rate will provide incentive to save and invest, which will lead to growth, reduce cost of uncertainty and encourage long term planning. Hence, positive interest rate encourages savings and investment and brings more capital into the system. Further monetary expansion by lowering interest rate will increase inflationary pressure and reduce capital flows. Therefore, continuous pumping of liquidity into the system will increase demand for foreign exchange and leads to increased cost of mopping up. Figures 9 and 10 illustrates trends in money growth and headline inflation rate, and capital inflows versus inflation rate, respectively.

5.0 Conclusion

The CBN deployed various approaches over the years, leading to the current flexible exchange rate regime. The Bank achieved some milestones from the implementation of the current policy; however, there are expectations of further improvement. There is however no doubt that, sustaining flexibility in the foreign exchange market remains the most viable option in the light of dwindling external reserves and the motivation to drive exports and support the import-substitution policy of government. Therefore, foreign exchange management shall remain a major tool of the CBN to influence economic activities and achieve the desired goal of achieving a stable price system.

While developed economies may choose to allow floating exchange rate, developing economies like Nigeria may find it difficult to do so. These economies face a dilemma between financial openness and exchange rate stability without losing monetary policy independence. Hence, central banks in developing economies like Nigeria need monetary independence in order to stimulate domestic growth with

interest rate. They also, need to ensure exchange rate stability in order safeguard the value of the currency, and preserve their foreign reserves, but at the same time, they require foreign capital flow, which may be difficult with capital controls. Consequently, given instrument limitations and other constraints, central banks in developing economies must aim to navigate the trilemma nightmare innovatively.

The CBN has continued to design and implement policies to ensure macroeconomic stability while confronting constraints in the policy environment as well as prolonged structural issues in the economy. Monetary policy alone cannot stabilize the economy; it requires coordination with fiscal and other structural policies and the active support of all relevant stakeholders in order to bring about enduring stability.

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