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# An Overview and Dynamics of Money Market Developments in Nigeria and Imperatives for Exchange Rate Stability

#### Emmanuel U. Ukeje\*

#### Abstract

The Money market plays an important role in the economic development of any country. It provides the platform for central banks to influence short-term interest rates, which in turn, affects other macroeconomic indicators, such as inflation and exchange rates. Interest rates are inextricably linked to the foreign exchange rate, and both serve as channels for the transmission of central bank's monetary policy. In Nigeria, the money market is supervised and regulated by the Central Bank of Nigeria. It has undergone various changes in terms of both the depth and value/volume of transactions, especially with the structural adjustment programme (SAP) in 1986, and the banking sector consolidation exercise of 2005. The reform programme of those periods also had different foreign exchange regimes. The Bank has, over the years, through various financial innovations, made concerted effort to ensure the effective and efficient functioning of the market. However, the presence of a large informal sector in the economy, low level of technological transformation and largely cash-based transactions, have continued to impair the needed progress. In addition, structural problems, headwinds from softening crude oil prices, slowdown in external demand and the uncertain political landscape, have precipitated demand pressure at the foreign exchange market. In view of this, it is recommended that the Central Bank of Nigeria continues to ensure money market stability, through proactive policy measures designed to achieve market efficiency. This, among others, includes; ensuring strong regulatory and supervisory role, ensuring market liquidity, diligent corporate governance and collaboration with the fiscal authority.

Key Words: Financial Markets and Foreign Exchange Rate Stability

JEL Classification: D53, F31

#### I. Introduction

Il over the world, central banks are faced with the daunting task of ensuring monetary and price stability, among other macroeconomic objectives. In formulating and implementing monetary policy, necessary for achieving these objectives, central banks ensure stable internal and external value for the national currency. It is important that the supply of money and credit to the economy is adequate to support desirable and sustainable growth without causing inflationary pressures and undue instability of the foreign exchange rate. Financial markets provide the veritable platform for the distribution of scarce financial resources either through the money or capital market as well as ensuring the hedging of risks that could arise in the foreign exchange and commodities markets. Thus, the existence of sound financial markets is at the heart of productive activities in any economy.

In literature, financial markets intermediary role of enhancing economic growth is linked to the Mckinnon-Shaw (1973) hypothesis<sup>6</sup>. Arguably, this hypothesis provides the framework for

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the subsequent drive by countries, especially the undeveloped economies to liberalise their financial systems. Nigeria's financial landscape has continued to evolve like other emerging markets and became deeper, following the financial sector reforms that accompanied the structural adjustment programme (SAP) of 1986. Prior to 1986, money market interest rates were administered or fixed, while the foreign exchange rate was either fixed or pegged to a currency or basket of currencies, and that, impeded the growth of the financial markets, thereby, slowing down monetary policy transmission. Since, 1986, money market and exchange rates, among other variables in the market, were driven largely by the interplay of market forces.

The money market rates are very important macroeconomic variables, which central banks use for achieving desired policy objectives. In particular, foreign exchange management is aimed at, the preservation of the external value of the domestic currency, maintenance of healthy balance of payments and ensuring domestic price stability. Central banks usually try to avoid foreign exchange rate volatility, which has adverse effect on the economy. The issue of foreign exchange rate volatility is very crucial to economic agents, owing to the risks of exposure to assets and liabilities on their balance sheet, as well as the current and expected cash flows (Akanji, 2006).

Interest rates play very crucial role in the implementation of monetary policy and at the same time, possess the potential of exhibiting erratic behaviour, which central banks try to mitigate in their pursuit of price stability. Hence, central banks are interested in eliminating frequent changes in interest rates (Bache and Barnhardson, 2009).

However, the efficiency and deepening of the money markets in Nigeria has been impaired by the presence of a large informal sector in the economy, the agrarian nature of production, communal restrictions and laws that guide saving mobilisation, low level of technological transformation and, largely cash-based transactions, despite the Bank's recent financial innovations and financial inclusion policies as well as its cash-less policy.

Thus, the paper examines the dynamics of the Nigerian money market; developments and imperative for foreign exchange stability. Following the introduction is section two, which provides an overview of the Nigerian money market. Section three contains stylised facts on the money and foreign exchange markets, while section four highlights the challenges and proffers the way forward. Section five concludes the paper.

#### II. Overview of the Nigerian Money Market

Prior to the establishment of the Central Bank of Nigeria (CBN) in 1959, there was absence of any formal money market institutions in Nigeria. However, in existence was part of the

<sup>&</sup>lt;sup>6</sup> The hypothesis posits that policies leading to the repression of financial markets reduce the incentives to save. Pointing out the key elements of financial repression as; high reserve requirement on deposits, legal ceilings on bank lending and deposit rates, directed credit, restriction on foreign currency capital transactions and restriction on entry into banking activities, cited in (Nnanna et. al., 2004).

London money market that transferred funds meant for financing exports to Nigeria. The Nigerian money market was established and nurtured by the Central Bank of Nigeria (CBN) for the purpose of mobilising domestic savings for productive investment and providing funds for government to enable its implementation of economic programmes (Nnanna et. al., 2004). The CBN is the major regulatory agency that supervises the activities of the operators in the money market. The apex bank does this through the issuance of policy guidelines and supervision of the market day-to-day activities with the aim of making it robust for monetary policy implementation. Apart from the CBN, there are other regulators, namely the Nigerian Deposit Insurance Corporation (NDIC) and the Federal Ministry of Finance (FMF). Operators in the market include Discount Houses, Deposit Money Banks (DMBs), special purpose banks, Debt Management Office (DMO) and the investing public.

The money market, which is a major component of the financial market, performs both primary and secondary roles. In the performance of its primary function, it serves as a channel for the issuance of short-term financial instruments or securities, of less than one year tenor or maturity, e.g., the Nigerian Treasury Bills (NTBs). The money market securities are more widely traded than capital market securities, owing to their short-term features, thus, making them more liquid. Also, short-term securities are less prone to fluctuations in prices than long-term instruments, hence they serve as a better investment haven. It also performs secondary roles by ensuring the trading of instruments that had been issued or are outstanding, thus reflecting the liquidity status conferred on them.

The money market in Nigeria has undergone several changes in terms of its structure and composition, institutions, instruments as well as rules and regulations that guide transactions between persons or corporates involved in financial assets and liabilities of various maturities. Also, the money market has continued to grow both in terms of value and volume of transactions, evolving financial infrastructure platform and rules and regulations guiding activities of the market participants, for example, the Financial Market Dealers Association (FMDA).

The market is dominated by the banking industry. The industry has undergone reforms in recent times, following the upward review of its capital base from \$\text{N}2.0\$ billion to a minimum of \$\text{N}25.0\$ billion, thus, reducing the number of banks to 25, from 89 in 2005, and thereafter to 24. The subsequent introduction of the new monetary policy framework in 2006 brought relative stability in the money market rates. Furthermore, the banks' assets base went up, while trading at the inter-bank funds market became more prominent, given that the overnight inter-bank call rate was influenced by the Bank's monetary policy rate (MPR). In December 2006, the MPR replaced the minimum rediscount rate (MRR), which was adjudged to be disconnected from the inter-bank interest rate and other market interest rates.

With these developments, the total assets of the banks and aggregate credit (Net) in the economy rose tremendously from N4,515.12 billion and N2,588.92 billion in 2005 to N17,

331.56 billion and \$\text{\tinte\text{\texi}\text{\text{\text{\text{\text{\text{\texi}\text{\text{\text{\text{\text{\text{\text{\tet

30,000.00 25,000.00 20,000.00 15,000.00 10,000.00 5,000.00 2005 2006 2007 2008 2010 2011 2012 2013 2014 2009 Year Total Deposit Money Banks Assets Agrregate Credit( Net)

Figure 1: Total Deposit Money Banks Assets and Aggregate Credit (Net)

Currently, banks are categorised into commercial, merchant and specialised banks with different capital bases, aimed at ensuring more professionalism in banking practices, rather than banks operating as 'financial supermarkets' to the detriment of core banking practices. Generally, the new banking model was designed to ensure the evolution of a financial landscape that would be capable of providing the platform for sustainable economic growth and development.

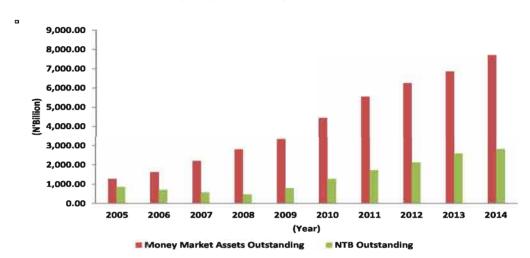


Figure 2: Total Value of Money Market Assets Outstanding and the Nigerian Treasury Bills (NTBs) Outstanding from 2005-2014

Trading at the market requires the use of short-term instruments, thus, providing good channel for transmitting monetary policy. Notable instruments/securities traded in the market include the following; Nigerian Treasury Bills (NTBs) of 91-, 182-, and 364-day tenors, bankers' acceptance, certificate of deposits, commercial paper, CBN bills and bankers unit funds, among others. Review of developments in market transactions showed that total value of instruments in the market has trended upward ever since the issuance of short-term treasury bills by the CBN in April, 1960 (Nnanna et. al., 2004). From \$\text{N}20.3\$ million in 1960, it rose to \$\text{N}798.0\$ million in 1970. With the banking industry consolidation of 2005, the total value of money market assets outstanding in the market moved from \$\text{N}1,275.52\$ billion in 2005 to \$\text{N}4,447.30\$ billion in 2010 and further to \$\text{N}7,705.25\$ billion in 2014. Also, the NTBs outstanding rose from \$\text{N}854.80\$ billion in 2005 to \$\text{N}1,277.10\$ billion and further to \$\text{N}2,815.52\$ billion for the period, 2010 to 2014, respectively, reflecting the increased reliance of the Federal Government on the use of NTBs for financing fiscal deficits. Hence, government instruments has dominated the market, and thus, depicting the government as the prime-mover of activity in the market.

#### III. Stylised Facts on Nigeria's Money and Foreign Exchange Markets

#### III.1 Inter-bank Funds Market

The market provides a platform for banks to undertake funds transaction in order to meet the cash or liquidity needs of their customers. These transactions are very important as individual banks can hardly maintain an equilibrium cash or liquidity holding at any given point in time. Therefore, the market provides an avenue for banks to lend out their excess funds, and others borrowing to cover shortfalls. It, also, serves as signal for understanding the direction of cost of funds in the money market, through the inter-bank call rate on overnight

loans. This short-term market interest rate is very important for monetary authorities and it lies at the heart of monetary policy (Bernanke and Blinder, 1992).

Money market interest rates are influenced by the Bank's MPR that operates within a corridor system. The corridor system has largely been successfully in limiting the fluctuations in the short-term interest rates and, in allowing central banks to provide liquidity, adequately, to the banking system (Kahn, 2010). Depending on the monetary policy stance, the corridor may be symmetric or asymmetric. Furthermore, there are other factors that could influence activities in the market, such as the liquidity position of banks, especially their excess reserve position and changes in the demand for foreign exchange, which determines the frequency with which banks access the market for funds, to cover their bids at the wholesale Dutch Auction System (wDAS) or retail Dutch Auction System (rDAS).

For example, in 2010, the interest rates in all segments of the market were generally lower than their levels in 2009, owing to the impact of the Global Financial Crises (GFC) which impeded the growth of monetary aggregates. During this period, the Bank among other intervention measures, injected over N620 billion into the banking system as well as purchased the non-performing loans of the distressed banks through the issuance of AMCON bonds. However, in 2011, there was improvement in the banking system liquidity and this continued into 2012. Money market rates moved in tandem with the credit and liquidity conditions in the banking system during the period. The higher levels of the rates that commenced during the fourth quarter of 2011 persisted through 2012 and peaked at the monthly averages of 17.27 and 16.03 per cent for the inter-bank call and open buy back (OBB), respectively, in August 20128. The high rates were attributed largely to the tight monetary policy stance of the Bank which led to the upward review of MPR to 13.0 per cent in October 2011.

<sup>&</sup>lt;sup>7</sup> A symmetric corridor is one, which both the central bank deposit and lending rates are equidistant to the MPR. The equidistant rule is not applicable in the case of the asymmetric corridor.

<sup>&</sup>lt;sup>8</sup> Prior to this period, CRR was reviewed upward from 8.00 to 12.00 per cent in July, 2012 and thereafter, restriction was placed on the simultaneous participation of authorised market dealers at the Standing Lending Facility and the WDAS.

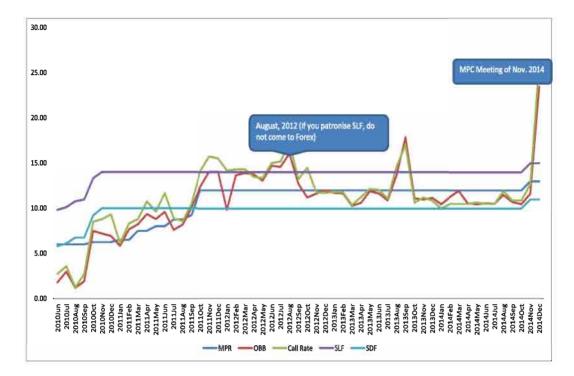


Figure 3: MPR and Weighted Monthly Money Market Rates from January 2010 – 2014 (%)

By December 2012, the inter-bank call and OBB rates were 11.8 and 11.7 per cent, respectively. However, there was relative stability from August 2012 – August 2013, until September 2014, when the rates moved to 17.82 and 16.98 per cent from previous month's 14.61 and 13.68 per cent, respectively. From October, 2013, the rates were very stable until November 25, 2014 following the movement of the mid-point of the exchange rate and the widening of the band from +/-3 per cent to +/- 5 per cent by the MPC meeting of November, 2014.

Given that the Bank is interested in ensuring banking system liquidity that is consistent with non-inflationary growth, its activities continued to influence the oscillation of the overnight, inter-bank rate around the "operating target", that is, the MPR. Consequently, the more the money market rates oscillate around the policy rate corridor, the greater the stability and liquidity position of the inter-bank funds market in Nigeria. For example, during the period of tightness, the Bank allows injection of liquidity into the banking system and vice versa, while maintaining control over the policy rate. Clews et. al., (2012) noted that central banks adjust the aggregate amount of banks reserves by undertaking Open Market Operations (OMO), repurchase agreements (repos) and reverse repos, while the on-demand/standing facilities contribute to keeping short-term market rates as close as possible to the policy rate.

50,000.00 45,000.00 40,000.00 35,000.00 30,000.00 25,000.00 20,000.00 15.000.00 10.000.00 5,000.00 0.00 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 Year Inter-bank Call Inter-bank Funds OBB and Tenored

Figure 4: Volume of Inter-Bank Funds Market From 2005 - 2014

The liquidity of the inter-bank funds market has improved remarkably since the banking industry consolidation of 2005. For example, the total volume of transaction at the inter-bank funds market increased from N5,600.60 million in 2005 to N19,534.75 million in 2010 and further to N43,588.80 million in 2011. However, by 2014, it declined to N7,242.79 million, compared with #21,331.17 million in 2013, thus, indicating reduction in the volume of interbank funds transactions. The decline was attributed to the high level of liquidity in the banking system in 2014, and a deliberate action to reduce the Bank's cost of liquidity management since the foreign exchange rates were relatively stable.

Hawever, in order to encourage trading among banks at the inter-bank funds market and discourage banks that are liquid from dumping such funds at the standing depasit facility (SDF) window, a limit of N7.5 billion was placed on the amount of daily remunerable SDF. Through this process, the market is further deepened. Despite this effort, there still exists an oligarchical structure in the market as banks preference for trading amongst one another differed. These attitudes did not only impact on the valume of transactions in the market, it also affected the mavement in interest rate as well as the fareign exchange rate.

The period 2009 – 2010 witnessed the Bank's guarantee of funds placement at the market, thus, encauraging banks to trade mare among themselves. The inter-bank call and OBB rates during this period trended around the MPR, while the margin between them reduced. This was further extended into 2011, before the guarantee was withdrawn in December 2011. Hawever, the period witnessed increase in manetary policy tightening, with the MPR moving from 9.25 in September to 12.00 per cent in October, 2011. The tight manetary palicy stance led to an increase in the value af transactians at the inter-bank funds market, as banks that could not access the CBN repo windows for lack of government securities as collateral<sup>9</sup> resorted to trading among themselves at high interest rates. For example, the inter-bank call and OBB rates increased from 6.13 and 5.84 per cent in January to 15.50 and 14.06 per cent in December 2011.

In 2014, transactions at the inter-bank call segment of the money market were very low, especially after the revocation of the operating license of a discount house and the suspension of another. Consequently, at the meeting of November 25, 2014, the MPC tightened the monetary policy stance in order to calm the market and reduce mounting pressure on the foreign exchange market as well as reduce the excess liquidity in the banking system.

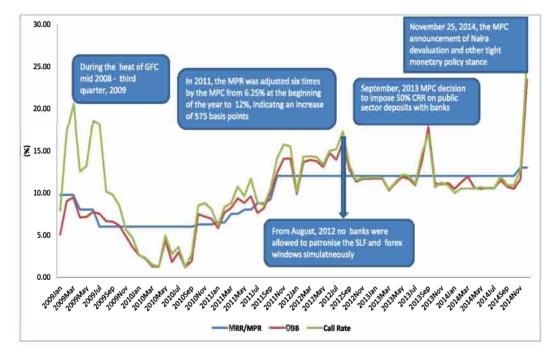


Figure 5: Movement in the Inter-bank Funds Market Rates from 2009 - 2014

Thus, the average inter-bank call rate and OBB rate moved from 12.66 and 11.62 per cent to 26.15 and 23.46 for November and December, 2014, respectively, while the demand pressure at the foreign exchange declined in December 2014, compared with the level in the preceding month.

#### III.2 Foreign Exchange Market

Nigeria's foreign exchange market is a secondary market for trading prices of currencies against another. The exchange rate affects the economy as well as our everyday lives. For example, when the price of the Nigerian naira appreciates against other currencies, it

<sup>9</sup> CBN (2011) Annual Report and Statement of Account.

makes foreign goods cheaper relative to those of the domestic currency. By so doing, it affects the domestic prices, interest rate and foreign exchange rate. The interest and foreign exchange rates are channels of monetary policy transmission mechanism, while their stability enhances the effectiveness and efficiency of monetary policy.

The Central Bank of Nigeria has operated various regimes of foreign exchange rate management since its establishment in 1958. The regimes were structured to complement the monetary policy framework of the Bank. More importantly, the Bank is interested in mitigating the volatility of exchange rate movements because of its impact on interest rates, price stability, economic growth, employment and external sector viability.

Nonetheless, the Nigerian economy can be seen as peculiar, considering its mono-product nature. The economy depends heavily on the revenue from the sale of crude oil, whose prices are exogenously determined. In addition, the prices could be very volatile and that affects the level of oil receipts and accretion to foreign reserves. Thus, the foreign reserves level tend to decline as the Bonny Light crude oil price declined and vice versa. The development will affect the level of the net foreign assets (NFA), which in turn affects the money supply as well as the movement in exchange rate.

It, therefore, behoves the monetary authority to design and implement policy measures that would mitigate the impact of foreign exchange rate volatility on the economy. Hence, the needs to manage the nation's foreign exchange resources adequately in order to reduce the adverse effect of foreign exchange volatility (Obaseki, 2001). Until SAP in 1986, activities in the foreign exchange market were concentrated in the Central Bank of Nigeria and the price of the domestic currency was determined based on the local economic conditions and the performance of the naira vis-à-vis other currencies.

Figure 6: Movement in the End-Month Foreign Reserves (US\$) and Monthly Price of Bonny Light Crude (US\$) From 2005 – 2014



With the deregulation of 1986, the price of the domestic currency was determined mainly by the interplay of market forces. The post-deregulation era showed that the official means of intervention by the apex bank has fluctuated between the wholesale Dutch Auction System (wDAS) and the retail Dutch Auction System (rDAS) and vice versa. In addition, different segments of the foreign exchange market were established to facilitate foreign exchange management, namely w/rDAS (Official), inter-bank and bureau-de-change segments of the market. The derivatives market for forwards and swaps transactions were also developed. Presently, the rDAS segment of the market has been closed. Consequently, the Bank only intervenes at the inter-bank market and the exchange rate at the segment of the market is currently the ruling rate.

#### III.2.1 Recent Developments in the Money and Foreign Exchange Markets in Nigeria

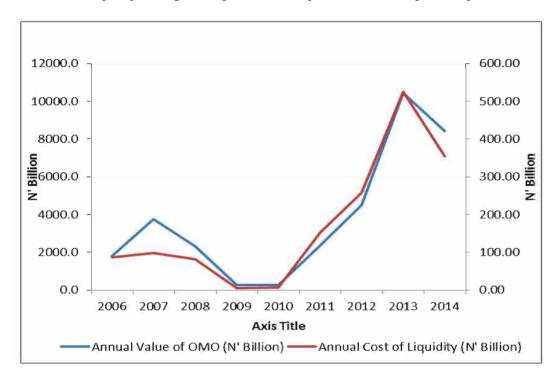
The announcement of possible reduction in the asset purchase programme by the US Federal Reserve Bank in May 2013 as well as economic recovery projections strengthened the US dollar against other currencies. Yields on fixed income went up and that prompted disinvestments from emerging markets, repatriation of investments by foreign portfolio investors in both the capital and money markets as investors moved their funds from riskier markets to more stable markets.

In addition, declining oil prices following the rising profile of shale oil and the seemingly uncertain political landscape fuelled market speculations and sentiments that impacted negatively on the economy. A fall out to these were declining capital inflows, dwindling receipts from foreign exchange earnings through the sale of crude oils and capital flight, all of which exerted undue pressure on the demand for foreign exchange in Nigeria.

Nonetheless, the liquidity surfeit in the banking system and the daunting fear of such funds being channeled to the foreign exchange market, resulted in the Bank's frequent use of OMO for liquidity management. This was complemented with the use of reserve requirements and foreign exchange interventions. From 2006 to 2014, the Bank has been experiencing increase in the total value of OMO bills sold and cost of liquidity management, except for 2009 and 2010, when the monetary policy stance was expansionary to cushion the effect of the financial and economic crises. The upward movement continued up till 2013, with total OMO sales amounting to \mathbb{1}10,447.95 billion, but declined in 2014, to \mathbb{1}8,422.70 billion. Also, the cost of liquidity management declined to \mathbb{1}353.40 billion by 2014 from \mathbb{1}524.85 billion in 2013. The outstanding OMO bills and Treasury bills holdings by banks and discount houses stood at \mathbb{1}2,057.07 billion and \mathbb{1}961.28 billion, respectively, as at end-March 2015.

In an effort to ease demand pressure in the foreign exchange market, the Bank reintroduced the retail Dutch Auction System, which replaced the wholesale Dutch Auction System on October 2, 2013. Owing to the disclosure requirements of the rDAS, it has been adjudged to be more transparent as it enabled the Bank monitor foreign exchange demand from different sectors of the economy. Furthermore, it helped the Bank to track the utilisation of funds and guard against speculation and round tripping.

Figure 7: Value/Volume of Open Market Operations and Movements In the Yearty Cost of Liquidity Management (CBN OMO Bills) from 2006 – 2014 (N' Billion)



However, despite the various actions by the Bank, demand pressure continued unabated at the various segments of the foreign exchange market. To stem this disturbing trend and mitigate the impact of the negative development in the international oil market, the MPC at its November 25, 2014 meeting increased the monetary policy rate (MPR) by 100 basis points from 12.0 to 13.0 per cent and the cash reserve ratio (CRR) on private sector deposits by 500 basis points from 15.0 to 20.0 per cent. Furthermore, the Committee moved the midpoint of the official window of the foreign exchange market from N155/US\$ to N168/US\$ and widened the band around the midpoint by 200 basis points from +/-3 per cent to +/-5 per cent. However, it retained the public sector CRR at its current level of 75.0 per cent and maintained a symmetric corridor of +/- 200 basis points around the MPR.

Movements in the monthly foreign reserves level and the average foreign exchange rates at the three segments of the foreign exchange market from September 2012 – October, 2014, showed that, during the wDAS period (September 2012 – September 2013) and the rDAS period (October 2013 – October 2014), there was wider premium at the segments of the latter compared with the former. In addition, there was more demand pressure, hence more sales during the rDAS period than the wDAS. On average, the monthly sales of foreign exchange when the wDAS held sway was US\$1,820.20 million, compared with sales of US\$2,609.08 million recorded during the rDAS period, indicating that the Bank sold more foreign exchange during the rDAS. The increase was attributed largely to activities of

customers who were front loading their demand in order to ensure that demands are met in the face of dwindling oil prices and declining foreign reserves.

Figure 8: Movements in the Monthly Foreign Reserve Level and Average Foreign Exchange Rate at the Three Segments of the Market from September 2012 – October, 2014

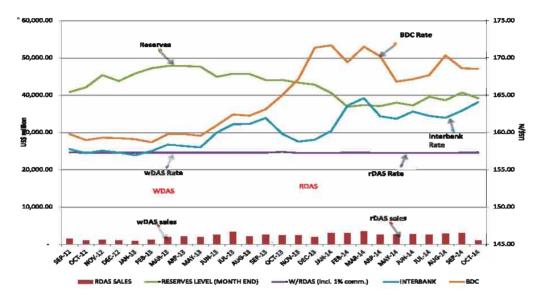
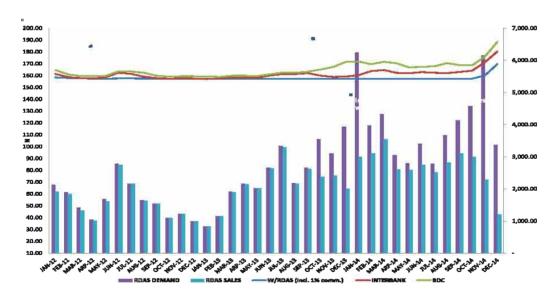


Figure 9: Movement in the Demand and Sales at the r/wDAS, Inter-bank and BDC Markets



A cursory look at the movement in the foreign exchange rate at the w/rDAS, inter-bank and BDC segments of the foreign exchange market from 2012 – 2014 indicated a widening premium between the rates at the segments from October 2013, especially between the w/rDAS and BDC segments. This, however, became pronounced by end December 2013 and throughout 2014. The scenario was also accompanied by increased demand pressure. However, the demand for foreign exchange at the rDAS segment declined to US\$3,364.93 million from US\$6,148.84 million between November and December 2014, while the exchange rate increased at all the three segments of the market from \$160/US\$, \$171.10/US\$ and \$175.85/US\$ to \$169.68/US\$, \$180.33/US\$ and \$188.45/US\$ for the rDAS, inter-bank and BDC segments, respectively, during the same period.

#### IV. Challenges and Way forward

#### IV.1 Challenges

#### **IV.1.1 Market Segmentation among Participants**

Transactions at the money market are largely consummated by the banks and trading among operators is very conducive for effective monetary policy implementation and transmission. On its part, the CBN strives to encourage trading among the banks, rather than them patronising the SDF window. However, this is impaired by the inability of some banks to trade with one another, thereby, introducing oligarchical structure within the market, which is not healthy for market stability.

#### IV.1.2 Volatile Exchange Rate

The volatility of the exchange rate constitutes a very serious concern to the Bank. Apart from exerting pressure on the domestic currency, it affects the short-term money market interest rates, hence, the term structure of interest rates. Currently, the Bank allows its foreign exchange rate to fluctuate within a band of +/-5 per cent, fallout of the demand pressure experienced in the market. The inter-bank market is currently trading outside the official band. Currency volatility leads to erosion of the value of the currency and loss of confidence in the currency as a store of value and medium of exchange.

#### IV.1.3 Structure of the Economy

The structure of the Nigerian economy is skewed and this has continued to affect her foreign exchange receipts. The economy, which is largely mono-product is dominated by crude oil, which price is exogenously determined. This poses the threat of unstable foreign exchange earnings, especially following the dwindling price of oil in the international market. Furthermore, the monthly monetisation of the Federation Accounts Allocation Committee (FAAC) funds for payments to the three tiers of government affects the cost of funds at the money market, thus, creating structural liquidity challenges for the Bank.

#### IV.1.4 Low Financial Infrastructure

The financial infrastructure in the money market is still inadequate, despite laudable efforts of the Bank at continuously engendering financial innovations. The Bank has initiated several innovations, including the recently adopted cash-less policy and the financial inclusion strategy. It has equally intervened in the past by guaranteeing inter-bank fund placements. All those efforts were directed at reducing cost of transactions. Yet, the market is still impeded by the underdeveloped financial markets structure.

#### IV.1.5 Money Market Instability

The Nigerian money market is still fragile, despite the various reforms carried out in the sector since 2005. Consequently, the participants, especially, banks are very cautious about trading among themselves. Recently, the withdrawal of the license of two of the participant, owing to infractions heightened anxiety in the market as interest rates increased, while there was decline in trading among them.

#### IV.1.6 Fragile Political and Economic Environment

Unstable political and economic environment pose serious threat to exchange rate stability. Given that domestic interest rate is influenced by international interest rate and expected rate of change in the exchange rate, it implies that any uncertainty in capital inflows and political environment affect the demand at the foreign exchange market. Nigeria's money and foreign exchange markets have been bedeviled with these challenges. The increasing demand at the foreign exchange market witnessed prior to the 2015 presidential election was fuelled by the increase in international interest rate and uncertainty surrounding the outcome of the presidential election, among others.

#### IV.2 Recommendations

#### IV.2.1 Enhancement of Financial Markets Stability

The CBN should continue to maintain the stability of the financial markets so as to strengthen monetary policy implementation. Sound financial markets require a strong macroeconomic environment and sound management of institutions. On the other hand, unsound macroeconomic environment such as volatility in interest rates, exchange rates, asset prices and inflation rates make it difficult for institutions to assess properly, the credit and market risks facing them.

Therefore, the Bank has a very unique role to play in ensuring the stability of the financial markets by preventing undue risk-taking by participants, ensuring adequate information on the financial conditions of institutions, maintaining effective supervision and regulatory environment as well as preventing concentrated ownership and connected lending. Furthermore, the Bank should continue the adoption of international standard and best

practice, while taking cognisance of our economic environment in developing sound and stable markets as well as ensure exchange rate stability.

#### IV.2.2 Ensuring Liquidity of the Money Market

Ensuring the optimal liquidity level in the money market is very important for exchange rate stability. As the platform for influencing the short-term interest rates by the Bank, it behaves on it to adequately ensure that the market is not starved of liquidity. Illiquidity of the market causes unnecessary market anxiety and sharp practices that could affect the cost of transaction and reduce market efficiency and vice versa.

#### IV.2.3 Regular Consultations with Money Market Participants and other Stakeholders

The Bank should consult regularly with market participants and other stakeholders in order to avoid communication gap. In that regard, the central bank's instrument of moral suasion becomes very handy. This involves continuous dialoguing with banks and other stakeholders in the money market through stakeholders' meetings, seminars and conferences. At such fora, operators' choices and thinking are thoroughly discussed with a view to discerning market preferences. Such fora would undoubtedly go a long way in aiding the Bank to come up with appropriate policies and actions capable of facilitating the efficient functioning of the market.

#### IV.2.4 Effective Collaboration between the Fiscal and Monetary Authorities

The proper functioning of the money market requires continuous collaboration between the fiscal and monetary authorities. This would ensure the stability of the money market. This collaboration could also cascade down to the subnational governments given that the country operates fiscal federalism. The structural liquidity experienced in the economy requires effective collaboration between the monetary authority and the three tiers of government.

#### IV.2.5 Development of Financial Markets Infrastructure

Recent developments in the financial markets have shown that more efficient financial markets will significantly improve the effectiveness of monetary policy in Nigeria. For example, the financial re-engineering experienced in the money market through the Bank's deployment of the improved real time gross settlement (RTGS) system and the Scripless Securities Settlement System (S4) have improved market operations. Efforts in this area should be sustained and the Bank, as a major stakeholder, should continue to play a leadership role in the development of the Nigerian financial markets. The Bank could

achieve this through the periodic assessment of the performance of market infrastructure, with a view to modifying its short, medium and long – term development initiatives.

#### IV.2.6 Stable Political and Economic Landscape

Money market interest and exchange rates are more stable in an environment of political and economic stability. Countries achieve much in an atmosphere of stability. Through this process, progress is achieved and macroeconomic variables are strengthened. Nigeria's political and economic stability is a *sine-qua-non* for achieving sound and stable macroeconomic environment.

#### V. Conclusion

The paper has attempted to explain the dynamics of the money market development as an imperative for foreign exchange stability. It explained how the activities in the money market, especially the short-term interest rates influence the stability of the foreign exchange market. Furthermore, it showed that money market interest rates are inextricably linked to the price of the domestic currency, which affects the cost of purchasing foreign goods and financial assets. It also indicated that the movement in the international price of crude oil affects the level of the nation's foreign reserves.

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