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Monetary Policy and Nigerian Banking Sector Performance: Evidence from Some Stylized Facts

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Abstract:

Most of the existing papers in Nigeria that address links between monetary policy management and banking sector performance used various econometrics and inferential statistical measures, with little or no concern for readers that are not quantitatively biased. Therefore, this paper characterized the trajectory paths of the dynamics of the performances of key monetary policy tools and banking sector performance indicators spanning 1985-2011. We found that despite the various financial sector reforms in Nigeria at the wake of global financial crisis, which has led to increase in the trends of some of these indicators, the widespread in the interest rate margin (high lending rates given by banks to investors and low deposit rates given to the depositors) has decelerate the pace of financial development and lower pace of economic growth as a result of lack of incentives to depositors, hence, their preference for other informal savings arrangements. Strengthening the monetary authority in Nigeria will therefore help in addressing these anomalies.

Keywords: Monetary Policy, Nigeria, Banking Sector Performance, Stylized Facts.

1. Introduction

Achieving pro-poor and long term sustainable economic growth and development has long been emphasized as a major macroeconomic objective of every nation of the world. The course of attaining this goal however depends among other things on the stability or the viability of the financial sector, especially the deposit money banks (commercial banks). Fulfilling this cogent role has had a multiplier effects on the rateof physical and human capital accumulation. Indeed, financial intermediation is carried out by these banks through conscious mobilization of domestic and foreign savings for subsequent investment by the firms; ensuring that these funds are allocated for the most productive use; spreading risk and providing liquidity so that firms can attain higher level of capacity utilization (FitzGerald, 2006). Thus, financial development involves the establishment and expansion of institutions, instruments and markets that support this investment and growth processes. Through the attainment of these functions, deposit money bankhas been noted to be a veritable ground that evidently establishes the nexus between financial development and economic growth.

Having realized that financial sector is very fundamental in catapulting a given economy to a greater height of growth and development, it behoves on the monetary authority of various economies to ensure adequate regulation of the sector to enhance their efficiency. In Nigerian economy however, dismal rate of performances of the banking sector have led to various reforms in the sector; ranging from Structural Adjustment Programme (SAP) of 1986 to the 2005 consolidations and recapitalization of Nigerian banks which have led to the emergence of mergers and acquisitions. Such reforms are the core of monetary policy administration; manipulating various tools to achieve financial stability of the sector. To understanding the theoretical undertone of such monetary policy action, we recalled that financial sector regulations are rooted in the theory of financial repression which posits that efficient utilization of financial resources through a highly organized, developed and liberal financial system enhances economic growth (McKinnon, 1973; Shaw, 1973).

In fact, monetary policy that is usually anchored by the apex monetary authorities in various economies is important and is defined by CBN, (2011) as a deliberate action of the monetary authorities to influence the quantity, cost and availability of money or credit in the economy in order to achieve desired macroeconomic objectives of internal and external balances. This action of the monetary authority is usually carried out by changing the volume of money in circulation and the interest rate. It is not an exaggeration that the importance of money in economic life has made policy makers and other relevant stakeholders to accord

¹The Government-led consolidation of the banks in Nigeria stems from the need to resolve problem of financial Distress and to avoid systematic crises as well as restricting inefficiencies in the banks (Ajayi, and Atanda, 2012)

special recognition to the conduct of monetary policy. This policy application could either be expansionary or contractionary at any given time depending on the monetary authorities.

Despite these definitions and the articulate framework for effecting monetary policy control of money supply, the concerns still remain that these functions of monetary policy in promoting banks' stability over the years has been dismal in Nigeria? This concern among others has attracted the attentions of many policy makers, business analysts, the academic circle and other researchers alike. The results of some of these studies such as Uda, (2008); Chuku, (2009); Akandi and Ajagbe, (2012); and Iyaji et al (2012) at addressing such concerns are still mixed in terms of the direction of impacts of monetary policy on the performances of the banking sector. Apart from these mixed findings of some of these studies and the seeming improvement in the Nigerian banking sector due to various reforms, it is sad to observe still in the recent times that issues of incessant banking fragility or distress, low capital based of most banks and low sectoral allocation of credits to other real sectors of the economy by the banks persists, thereby casting doubt on the effectiveness of monetary policy implementation by monetary authority in Nigeria in improving the performances of the sector.

Evidently, above concerns have raised such questions as: what is the nature of the trajectory of banking sector performance indicators and monetary policy instruments in Nigeria? What are the necessary policy recommendations that could enhance the effectiveness of monetary policy that will in turn stabilize and enhance the performance of the Nigerian commercial banks? These questions among others are addressed in this study. This study is therefore significant in expanding the frontier of knowledge in this areas because it concentrates wholly on analysing the trends of the performance of key monetary policy and banks' performance indicators in Nigeria² unlike some of the aforementioned studies which did not give special treatment of the scenarios of the trends and the dynamics of the growth/performance paths of these key sector. Thus, the broad objective of this paper is to characterize the growth paths or the trajectory of the performances of monetary policy instruments and the banking sector in Nigeria for the period of 1985-2011.

The merit of this approach hinges on the premise that, even without empirical evidences through rigorous econometric approach; a non-professional could easily detect the trends or the dynamics of co-movements (volatilities) of these variables. The necessary secondary data used in the geometric analysis of the trends were sourced from the Central Bank of Nigerian (CBN) Statistical bulletin and other statement of account (for various years) and Nigerian Stock exchange Facts book on the annual level of profitability of the banking subsector. Following the above general introduction, Conceptualization of Monetary Policy is established in the second section. We established the theoretical basis for monetary policy-bank's performance nexus in section three. Section four contained a unique characterization of some performance paths or trends of the variables of monetary policy tools and some banks' performance indicators. The last section housed the major findings from the stylized facts, useful conclusions and recommendations on how the financial sector in Nigeria, especially the deposit money banks could boost to function optimally.

2. Conceptualizing Monetary Policy in Nigeria

Aside from the definition of monetary policy given by the CBN, (2011) as noted above, Odeniran and Udeaja, (2010) and Ajayi and Atanda, (2012) express similar view that monetary policy is a major economic control tool which involves a number of measures for the purpose of regulating, controlling and managing the volume of money and credit in an economy so that sustainable economic growth and development could be stimulated. Okwu, et al., (2011) stress as well that monetary policy is undoubtedly a veritable tool to be employed in macroeconomic management and for achieving stability of the financial system. It implies therefore that in Nigeria like any economies of the world, the primary objective of monetary policy should be on how to realize a stable and non-inflationary growth rate of the economy. If this objective is particularly achieved, it will give the citizens confidence in the future value of their money, so that they can make sound economic and financial decisions. Aside from the traditional roles of monetary policy in regulating the volume of money supply as to avoid high level of inflation growth, monetary policy in the recent time is meant to smooth the business cycle, preventing financial crisis and stabilizing long term interest and exchange rates in view of the just ended financial crisis which has engulfed major developed and emerging economics in the world (Mishra and Pradhan, 2008).

3. Monetary Policy-Banks' Performance Nexus: A Theoretical Basis

For most countries of the world, monetary policy objectives are explicitly stated in the laws that establish their central bank. The objectives of monetary policy may therefore be country-specific depending on the legal provisions operational in each country. However, monetary policy objectives common to all nations of the world include; achievement of economic growth, price stability, Increase in employment rate, and maintenance of a healthy balance of payment position among others. Also, there are transmission mechanisms through which monetary policy implementation affects the economy at large and the banking subsector in particular. The monetary and the Keynesian schools of thoughts have greatly debated on the various mechanisms over the ages. To the monetarist school, Friedman (1963) has it that change in money supply leads directly to change in the real magnitude of money. Describing this transmission mechanism, Friedman and Schwartz (1963) maintains that an expansive open market operation (OMO) increase stock of money which also leads to an increase in commercial bank reserves and ability to create credit and hence increase money supply through the multiplier effects. Manipulating monetary policy through this mechanism according to this school of thought is for the Central Bank (Apex monetary authority) to sell the monetary portfolio under their care to the deposit money banks and the non-bank institutions as to stimulate economic activities in the real sector.

Conversely, the Keynesian school posits that change in money stock facilities in the financial markets (commercial banks inclusive) affect interest rate, investment, output and employment. Modiglian, (1963) support this view by introducing the concept of capital rationing and conclude that willingness of banks to lend credits affects monetary policy transmission in the economy.

² See Ajayi and Atanda, (2012) and Akande and Ajagbe, (2012) for a good review in this regard.

We conclude therefore that there is a linkage between monetary policy management and the performance of the banking sectors, which potentially affects the general performance of the economy.

4. Some Stylized Facts on the Performance of Nigerian Monetary Sector

In this section, we analyse the trends and the dynamics of monetary policy performance and some key performance indicators of Nigerian deposit money banks for the period of 1985 to 2011. To understanding the trends of the application of monetary policy instruments in Nigeria, it is worthy to portray the path of the growth of the monetary development. Historically, it is evidenced that the evolution of monetary policy in Nigeria can be classified into two phases: (1) the era of direct controls (1959-1986) and (2) the era of market-based controls (1986-date). The era of direct controls was a remarkable period in monetary policy management in Nigeria, as it coincided with several structural changes in the economy; including the shift in the economic base from agriculture to petroleum, the execution of the civil war, the oil boom and glut of the 1970s and early 1980s respectively. Omotor (2007) observe in this regard that monetary policy was ineffective in the first era particularly because the Central Bank of Nigeria (CBN) lacked autonomy as they were heavily influenced by the political considerations through the Ministry of Finance.

The introduction of the Structural Adjustment Programme (SAP) in 1986 marked the dawn of the second era of monetary policy implementation which was market based. During this period, CBN's monetary policies focused on market-determined control of interest rates and exchange rates, selective sectoral credit allocation, manipulation of the discount rate and involving in moral suasion. Consequent upon SAP, a new era of monetary policy implementation with market-friendly techniques in Nigeria is reckoned, even till this present decade. Here, the capacity of the CBN to carry out monetary policy using market friendly techniques is reinforced by the amendments made to the CBN Act in 1991 which specifically granted the CBN full autonomy. Thus, the CBN indirectly influences economic parameters through its Open Market Operations (OMO), Treasury Bills (TBs) and Repurchase Agreements (REPOs). These instruments are being complimented with the use of reserve requirements, the Cash Reserve Ratio (CRR) and the Liquidity Ratio (LR) among others to determine the quantity of monetary aggregates in Nigeria. In addition, the Minimum Rediscount Rate (MRR) is vigorously pursued as a price-based nominal anchor to influence the direction of the cost of funds in the economy. Changes in this rate give indication about the monetary disposition of the monetary authority whether it is pursuing a concessionary or expansionary monetary policy. As a companion to the use of the MRR, the CBN latter introduced the Monetary Policy Rate (MPR) in 2006 which starts an interest rate with plus or minus two percentage

points of the prevailing MPR. The ultimate goal is to maintain low, stable inflation and maintain stable value of the domestic currency. To characterize the dynamics of variations in the growth paths of some of the aforementioned monetary policy

4.1 Some Monetary Policy Performance Indicators

variables, we present tables and charts below for clear understanding.

4.1.1Broad Money Supply (M2)

Money supply is the aggregate stock of money in circulation in the economy for a given period of time, usually a year. It is a strong determinant of the level of economic growth. Shift in the supply and demand for money are monetary policy phenomenon that have pervasive influence on virtually all the major macroeconomic variables in the economy. For instance, national output, employment, exports and imports, exchange rates and the balance of payments are significantly influenced by the amount of money in circulation. Both the Broad and narrow money are important in the economy thus, this study examinesthe trend in the growth of this monetary policy target variable over the years covered.

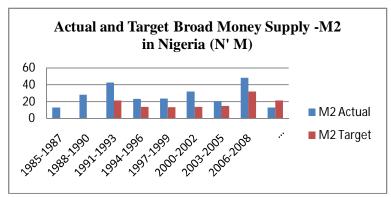


Figure 1: Trends in Average Broad Money Supply in Nigeria (1985-2011) Source: Graphed by the Author from CBN Statistical Bulletin, 2011

The trend in the growth of average broad money supply for the period of 1985-2011 shown in the graph above reveals that the general dynamics of broad money supply is unstable. Here, there was an increase in the growth of actual broad money supply (ABMS) from 13.2 % to 28.1% and 43% in 1985-1987, 1988-1990 and 1991-1993 respectively. But in the immediate proceeding period (1994-1996) it fluctuated to 23.4% and subsequently increased to 23.8% and 32.2% for the 1997-1999 and 2000-2002 average years respectively. The highest peak in the growth trend of ABMS for the periods of time considered in this study occurred between 2006 and 2008 (49%). The trajectory of growth paths of target broad money supply (TBMS) experienced within the periods is not significantly different from that of ABMS. We notice carefully that the peak periods in ABMS and TBMS both

coincide with the period of global financial crisis and this may probably explained why an abrupt increase in money supply could induce inflationary pressure in the economy.

4.1.2 Money Supply (M1)

Narrow money, which is popularly denoted as M1 definition money according to Friedman represents the total amount of currency in circulation in the economy at a given fiscal year. Unlike the broad money definition, this includes only the currency (notes and coins) with the general public and not all the deposit with the deposit money banks (commercial banks). The necessity to examine the growth in this type of money (M1) is that, Nigeria is an economy in which large proportions of the citizenry still hold money. Therefore, accounting for the path of growth of M1 over the years will show the level of monetary development in the economy.



Figure 2: Trends in Average Broad Money Supply in Nigeria (1985-2011) Source: Graphed by the Author from CBN Statistical Bulletin, 2011.

The figure reveals that the actual narrow money supply (ANMS) has its highest peak (45.3%) between 1991-1993 average years. This was followed by 2006-2008 average year where the level of average percentage growth in ANMS was 42%. Similarly, it was in the period of 1991-1993 average years that the target narrow money supply (TNMS) was at its highest peak (20%). This was however followed by the trend in 2009-2011 average years where total aggregate percentage growth in TNMS was put at 18.2%. It is glaring from figure 2.1 and 2.2 that the trends in the monetary policy target of actual and target broad and narrow money over the years are not significantly different from each other, yet we found that the trajectory of broad money supply have more perverse impacts on the economy than the narrow money supply because the latter has to do with the involvement of the deposit money banks

4.1.3 Actual and Targeted Inflation Rate

One of the most prominent monetary policy objectives is to achieve price stability. In a bid to achieve this objective, monetary authorizes in any countries of the world usually target low level of inflation rate. It is therefore worthy of investigation in terms of the trend of the growth and the general dynamics of actual and targeted inflation rate in Nigeria for the period of 1985-2011 to derive the possible stylized facts on the general behavior of the variable.

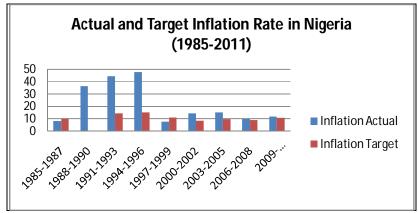


Figure 3: Trends in Average Inflation Rate in Nigeria (1985-2011) Source: Graphed by the Author from CBN Statistical Bulletin, 2011

The graph of the trend in inflation rate in Nigeria for the period of 1985-2011 as demonstrated in figure 2.3 above shows that the targeted level of inflation for the average years covered in the study is below the actual inflation rate that has been experienced in the economy. For instance, actual inflation rate (AIR) was at its highest peak (48%) during 1994-1996 average years, while the

targeted inflation rate (TIR) for the same period was 15%. It can actually be commented that in the recent decades, both the trend of actual and targeted inflation rate depreciates compare to what was obtainable in the 1990s. We cannot however assumed that the Nigerian economy have been comprehensively achieved the new policy thrust of inflation targeting. Moreover, these declines do not in any way shows that the standard of living of the Nigerians improved. This may not be unconnected with huge political expenditures and the perverse corruption in the country.

4.1.4 Monetary policy Rate and Treasury Bill performance in Nigeria

Efficacy of monetary policy in regulating the economy is often measured by the monetary policy rate, and Treasury bill is a significant financial investment instrument often used by the central banks by persuading or employing the banks to invest in it. In reality, the stylized facts and figures on their trends will immensely help in knowing the dynamics of changes in these variables.

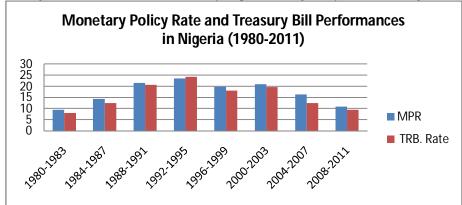


Figure 4: MPR and Treasury bill Performances in Nigeria (1980-2011) Source: Graphed by the Author from CBN Statistical Bulletin, 2011

From the above figure, we observe that changes in the level of monetary policy rate (MPR) gradually increased from 9.3 % in 1980-1983 to 14.3% in 1984-1987 average years. Subsequently, it increases to 21.4% and 24% for 1988-1991 and 1992-1995 average years respectively. Also, monetary policy rate fluctuates in the recent years from 20% in 1996-1999 to 11% in 2008-2011 average years. A similar pattern of trend is also observed in the Treasury bill (TB). It rose from 8 % in 1980-1983 averages to the highest peak (24.3%) in 1992-1995 average years, and fluctuates further from 18.1% to 9.3% for the periods of 1996-1999 and 2008-2011 respectively. It can therefore be argued from the above that the administration of MPR and TB by the CBN has not been effective over the years.

Indeed, the general macroeconomic environment that guided monetary policy implementation during and after the SAP era could be termed as the period of boom and burst. There is therefore need for effective monetary policy implementation in the economy for rapid economic stabilization and the growth of the financial sector. We examine performance indicators of the banking sector below.

4.2 Some Banking Sector Performance Indicators

4.2.1. Some Banking Sector Performance Trend

Performance levels of the financial sector, especially the Deposit Money Bank in any economy is so instrumental to the overall development of the economy. Thus, examining the trajectory of growth in some important indicators of banking sector is necessary. The figure below describes the scenarios of growth in some selected indicators.

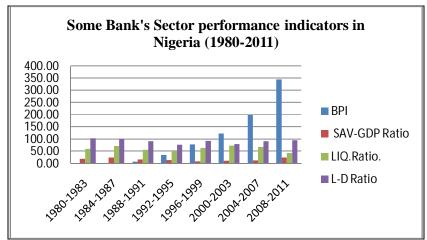


Figure 5: Trend in Some Banking Sector Indicators in Nigeria. Source: Graphed by the Author from CBN Statistical Bulletin, 2011.

The graph shows that the rate of growth in the overall bank performance index (BPI) significantly increased in the recent decade. The peak point of the trend occurred in 2008-2011 average fiscal years of up to 345.4%. It was previously 199% in 2004-2007 average fiscal years. The general trend (performance) of Total bank savings to GDP ratio which measures the contribution of the banking sector to the overall national savings, vis-à-vis investment was low, however, it accelerated during the period of 2008-2011. Furthermore, the level of liquidity ratio was high (peak) at 73.5% in 2000-2003 average fiscal years and it reduced to 68.4% in 2004-2007 and 43.7% in 2008-2011. Except for Load-Deposit Ratio which was higher in the 1980s compare to 1990s and 2000s, we observed that there is impact of merger and acquisition (bank consolidation) on the behavior of the banks as revealed in the trend of liquidity ratio. The indication here is that the lower the growth level in liquidity ratio, the more stable and less fragile the banking sector would be. Thus, in the recent years, the overall performance of the deposit money banks in Nigeria is encouraging.

4.4.2 Trend in Interest Rate spread in Nigeria

One of the most important targets of monetary policy is to address the problem of wide gap in interest rate spread in Nigeria. The Nigerian banking sector especially pay little interest rate on savings by the depositors, while higher amount of interest rate is being charged as lending rates to borrowers (investors). One of the significant effects of this widespread in interest rate margin between the saving and lending rates in Nigeria discourages increase in investment (especially domestic investment). It is therefore interesting to examine the scenarios of movements in interest rate spread in Nigerian banking sector.

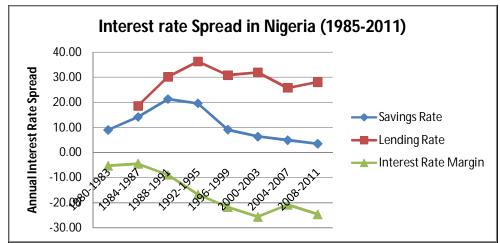


Figure 6: Trend in Interest Rate Spread in Nigeria. Source: Graphed by the Author from CBN Statistical Bulletin, 2011

The figure revealed that there is high or increasing competition for deposits by investors which drove nominal lending rates up thereby leading to no cheaper cost of investment. It could be depicted from the graph that the differences between savings and lending rates have shown negative for the period of time covered in the study. In short, the margin continues to worsen from 1980 to 2011 as lending rate increases. Furthermore, the graph shows that the savings deposit interest rate paid by the banks to depositors significantly decreased over the years, while that of lending rate significantly increased. Respective values or figures portrayed in the graph could be seen by bursting or popping the lines in the graph.

It can be concluded that the worsening nominal interest rate spread (implied by a widening in the spread as depicted in the chart) is a reflection or an indication that the various reforms in the banking sector did not improve the availability of loanable funds. The spread was expected to narrow as more efficient business practices were embraced sequence to increasing competition and credit demand being stabilized through the reform.

4.2.3 Trend in Nigerian Financial Deepening

Overall impact of monetary policy on the banking sector is expected to lead to stability in macroeconomic variables generally and the rate of financial development in the economy. Thus, financial deepening is a good measure of how effectiveness of monetary policy in the economy could be reflected. The graph in figure 2.8 below shows the trends of the two measures of financial deepening in Nigeria.

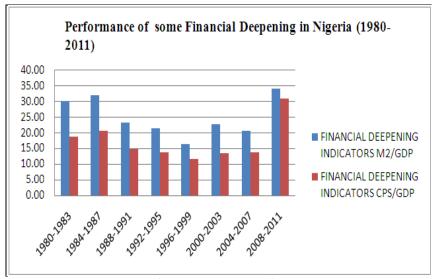


Figure 7: Trend in Nigerian Financial Deepening (FD) Source: Graphed by the Author from CBN Statistical Bulletin, 2011.

Since 2008, the principal nucleus of the conduct of monetary policy by the Central Bank of Nigeria has been on how to influence the growth of money supply that will be consistent with the required aggregate Gross Domestic Product (GDP) growth rate, ensure financial stability, maintain a stable and competitive exchange rate of the naira, and how to achieve positive real interest rates. From the above table, we found that from 1980-1983 average fiscal years, the rate of financial deepening measured as a ratio of broad money to GDP increased from 30% to 32% in 1984-1987. After these years, it fluctuates from 23.2% in 1988-1991 to 21.4% and 16.3% in 1992-1995 and 1996-1999 respectively. In short, there have been some levels of alternating rise and fall in the rate of financial deepening (FD) until its highest peak for the periods was reckoned in 2008-2011 average fiscal years where the highest rate was 34%. Similar dynamics of variations were experienced in the second measure of FD (The ratio of credit granted to private sector by commercial banks to GDP). This measure is significant because it shows how much the bank has influenced the growth of the private sector and its quota of contribution to economic growth and development.

5. Findings and Discussion

Based on the foregoing geometric descriptions of the features (stylized facts) of the dynamics of performance of monetary policy tools and some performance indicators of the banking sectors, we distinctively found that the implementations of the various monetary policy instruments in Nigeria are expected to yield positive changes or increase in the overall performance of the banking sector in Nigeria. However, in spite of the various financial sector reforms and liberalization that would narrow the spread between deposit and lending rates, the interest rate spread (lending-savings rate margins) has been dramatically higher in Nigeria in the post reform period than in the pre reform era. In fact, despite the seeming increased in the performance of commercial banks in Nigeria within the reviewed period, we still find that national savings to GDP ratio decrease majorly due to the wide gap and the fluctuating nature of the interest rate margin. Also, the level of expected financial development, measured by financial deepening continued to witness a dismal growth rate.

Indeed, a nutshell, the study found that (i) the usage of monetary policy (MP) instruments by monetary authority in Nigeria with the aim of influencing the performance of the deposit money banks (DMBs) are related with theoretical nexus of MP with Banking sector performance, (ii) MPR which Is like the minimum rediscount rate or cash reserve ratio charged by the Central Bank on deposit money banks may be too low. This may account for why is DMBs are at liberty to charge high/low amount of lending rate/saving rate to the investors/savers. Against this background, the following recommendations are suggested:

6. Conclusion and Recommendations

In conclusion, we found that at the wake of global financial crisis, the monetary authority in Nigeria (CBN) largely saw the various instruments of monetary policy as the key to rapid economic growth and development, and particularly to address the problem of liquidity shortages in the banking system. However, it is still disheartening to note that a decade after reforms in the sector started, the spread in the interest rate margin continued to widen in Nigeria. Consequently, the effectiveness or otherwise of monetary policy during this era is still an issue in debate. These conditions of low performance of monetary policy in Nigeria may not be unconnected with the myriad of challenges such as fiscal dominance and non-synchronization of fiscal and monetary policies, the existence of a large informal sector, debt and liquidity overhang, and inconsistence data among other reasons. Good policy prescriptions are necessary here to remedy the above anomalies.

First, one of the good policy paths to change these situations is optimal policy mix framework. In achieving this recommendation, the policy makers are expected to have a good synchronization of both monetary policy and fiscal policy. Although fiscal policy concerns with the use of revenue and expenditure policy, but having a right combinations of various policy options will help in solving the perceived ineffectiveness of MP implementations in Nigeria. Second, in order to avoid non-synchronizations of some monetary policy measures with the overall annual goals of individual banks, it is necessary for each bank to submit yearly

financial plans to the Apex bank for necessary approval. Third, regulation at checkmating excess lending rate in terms of interest rate pegging for the commercial banks will be necessary in order to increase savings and investments.

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