

EDUCATION IN ECONOMICS SERIES

NO. 2

MONETARY POLICY



CENTRAL BANK OF NIGERIA

RESEARCH DEPARTMENT

2016

Contents

1.	Introduction	1
2.	Conceptual Framework	1
2.1	Definition of Money	1
2.2	Money Supply	2
2.3	Measures of Money Supply	2
2.4	Demand for Money	4
2.5	Monetary Policy	4
3.	The Goals, Targets And Instruments Of Monetary Policy	4
4.	Monetary Policy Strategies	7
4.1	Monetary Targeting	7
4.2	Interest Rate Targeting	8
4.3	Nominal Gross Domestic Product (NGDP) Targeting	8
4.4	Exchange Rate Targeting.	9
4.5	Inflation Targeting	10
4.6	Price level targeting	10
4.7	Quantitative Easing	10
5.	The Monetary Policy Transmission Mechanism	11
5.1	Transmission Mechanism of Monetary Policy	11
5.2	Interest Rate Channel	12
5.3	Exchange Rate Channel	12
5.4	Asset Price Channel	13
5.5	Credit Channel	14
5.5.1	Bank Lending Channel	14
5.5.2	Balance Sheet Channel	14
6.	Monetary Policy Implementation In Nigeria	15
6.1	Monetary Policy Strategies in Nigeria	15
6.2	Instruments of Monetary Policy in Nigeria	16

7.	The Institutional Framework For Monetary Policy In Nigeria	18
7.1	The Institutional Framework for Monetary Policy in Nigeria	18
8.	Other Issues In Monetary Policy	20
8.1	Monetary Policy and Economic Growth	20
8.2	Monetary Policy and Inflation	22
8.3	Monetary Policy and Government Revenue	23
8.4	Monetary Policy Communication	24
8.5	Monetary Policy and You	25
8.6	Challenges to Monetary Policy in Nigeria	25
	References	27

List of Tables

Table 1: Monetary Policy Instruments, Target and Goals	6
--	---

List of Figures

Figure 1: Monetary Policy Strategies in Nigeria	16
Figure 2: Monetary Policy: Instruments and Targets	17
Figure 3: Monetary Policy Institutional Framework	20

1. Introduction

In this series, we look at monetary policy: its nature, formulation, and implementation in Nigeria. We begin with conceptual framework in Section Two, where money, money supply, demand for money and monetary policy are defined. In Section Three, we explain the objectives and instruments of monetary policy. This is followed by strategies of monetary policy in Section Four, monetary policy transmission mechanism in Section Five, and monetary policy implementation in Nigeria, in Section Six. The Institutional framework for the implementation of monetary policy in Nigeria is discussed in Section Seven, while Section Eight focuses on other issues in monetary policy households may therefore reconsider their savings and investment plans with possible effects on the demand for goods and services.

2. Conceptual Framework

2.1 Definition of Money

Money is simply anything of value that is accepted by the general public for the purpose of making transaction and settlement of debts. Money is used primarily as a means of exchange and plays an important role in the settlement of financial obligations.

In most cases, money is regarded as currency (notes and coins) because it is easily used in making payments. That is why people use the term money and currency as meaning the same thing. However, money is more than currency in that it includes other things that are used for transactions. For example, in ancient civilization, cowries served as medium of exchange. Today, quite a number of countries have their own currency or money in the form of coins and paper notes, which is widely accepted in exchange for goods and services, as well as for debt settlement. The main reason currencies are

¹ Contributors to this series are: *Oko Mbutor; Chioma P. Nwosu; Oladunni Adesanya and Kamaldeen Ajala*

generally accepted is because their issuance is backed by law. In Nigeria, the national currency (naira and kobo) is issued by the Central Bank of Nigeria (CBN) and it is the legal tender for the settlement of financial transactions.

Money can also be used for other purposes beyond the settlement of financial obligations or as a medium of exchange. It can serve as a unit of account and hence can be used in determining the value of goods and services. Money also acts as a standard for measure of value for goods and services. Besides these functions, money also acts as a standard of deferred payments and store of value.

2.2 Money Supply

Money supply is the sum of all money or monetary assets that can easily be converted to cash in an economy at a specific time. It is often referred to as money stock since it is measured at a particular point in time. Money supply is closely monitored by the monetary authorities – the central banks – because if the rate of increase in money supply is consistently greater than the rate of increase in total output of goods and services in the economy, there could be a general increase in the domestic prices of goods and services: a situation generally referred to as inflation.

2.3 Measures of Money Supply

Money supply is measured differently by countries depending on how developed the financial system is. In Nigeria, the different measures of money supply known as monetary aggregates include; monetary base, narrow money and broad money.

The monetary base, also known as the base money, high-powered money or reserve money, is the sum of currency outside banks, currency in the vault of deposit money banks (DMBs) and the cash reserves of DMBs with the central bank (R). The sum of currency outside banks and currency in vault of DMBs is called currency in circulation (C). The monetary base is the most liquid

measure of money supply and the lowest classification of money, often denoted as M_0 . Symbolically, the monetary base is expressed as

$$M_0 = R + C.$$

For example, suppose Nigeria has N500 million circulating in the public and N10 billion as part of deposits from DMBs in the central bank. In this case, the monetary base for Nigeria is N10.5 billion. The monetary base can be controlled by the monetary policy actions of the central bank. This is because some of its components (bank reserves) are directly under the central bank's control. The measure of money supply is very important in monetary management. This is because central banks control money supply through the measure of money.

Narrow money (M_1) is another measure of money and is made up of all currencies in circulation (C) and demand deposits (DD) belonging to different households and businesses with DMBs. Put differently, M_1 is the sum of all paper notes and coins in circulation and balances in current accounts used for effecting payments. It is expressed as:

$$M_1 = C + DD.$$

Broad money (M_2) is the broader measure of money supply and it consists of the components of narrow money, time deposits (TD), and savings deposits (SD) with DMBs. In terms of symbols, broad money can be written thus:

$$M_2 = C + DD + TD + SD$$

Or

$$M_2 = M_1 + TD + SD.$$

Savings and time deposits are also called near or quasi- money.

In other economies, money supply goes beyond the M_2 . For instance, in the United States of America, there is M_3 , which includes M_2 plus large time

deposits, large denomination term repurchase agreements, shares in money market, mutual funds owned by institutional investors and some Eurodollar deposits.

2.4 Demand for Money

The demand for money is the desired holding of money by people or the amount of money people would like to hold at a particular point in time. The money can be held as cash or bank deposits. The reason people desire to hold money differs. Some people may need to hold money to settle their financial commitments (transactions demand) while some may hold money to meet unexpected events (precautionary demand). There are those who may hold money in order to take advantage of expected future changes in prices (speculative demand).

2.5 Monetary Policy

Monetary policy refers to any conscious or deliberate actions of the monetary authorities, mostly central banks, to control (change) the quantity, availability or cost of money in an economy in order to achieve laid down goals/ objectives. It is also a combination of policy measures designed by a central bank to control the quantity of money and cost of credit in the economy in consonance with the expected level of economic activity. In other words, monetary policy is the process by which the central bank or monetary authorities of a country controls the supply, availability and cost of money in order to attain a set of objectives, usually geared towards promoting national economic goals. It is, therefore, the deliberate actions taken by the central bank to stabilize the economy.

3. The Goals, Targets and Instruments of Monetary Policy

Monetary Policy is used by Central Banks for the purpose of achieving certain national goals or objectives. These goals, which are in line with basic macroeconomic objectives included, low unemployment, high output

growth rate, low inflation rate and stable exchange rate. These objectives are simply referred to as “goals” or as “ultimate goals” of monetary policy. Of all these goals, price stability has become the most prominent in recent times. That is why central banks in most countries including Nigeria have as their core or primary mandate, maintenance of price stability.

In order to achieve these goals, central banks usually use indirect means which involves choosing the tools or instruments they can directly control, use or operate. These instruments are commonly referred to as “Instruments of monetary policy”. Among the instruments at the disposal of central banks are: (i) bank rate or monetary policy rate or rediscount rate (the rate at which the central banks lend to or discount bills held by DMBs and other institutions; (ii) open market operation (OMO) (the purchase or sale by the central bank of securities in financial markets); (iii) reserve requirements (often expressed in percent is the minimum reserves DMBs must hold in their vaults and the central bank against the public's deposit with them); (iv) selective control (for example credit control) which is meant to impact certain sectors rather than the whole economy in order to either satisfy social priorities, control the destabilizing nature of certain sectors or use the critical position of certain sectors for stabilization purposes; and (v) moral suasion (the use of the influence of the central bank upon DMBs to follow its suggestions and recommendations which are believed to be in the interest of the whole economy).

Generally, the instruments of monetary policy are directed at target variables which are broadly defined as those whose values the central banks want to change. The targets can be ultimate (final goals as mentioned above), intermediate (which the central banks seek to influence, such as the money supply or the interest rate) or operating ones (which the central banks can influence directly using policy instruments such as the monetary base or the discount rate). A target can also be used to indicate a desirable value of a

goal (such as inflation) or of an intermediate variable (such as the money supply and market interest rate).

What the central bank does is to use its policy instruments to hit its operating targets with the intention of influencing the intermediate targets in order to achieve its goals. In the process, the central bank can adopt either an expansionary or contractionary policy stance depending on macroeconomic conditions. For instance, if an economy exhibits strong sign of rising general price level (inflationary tendency), the central bank may reduce the level of money supply using the instruments of monetary policy. When this happens, the central bank is said to adopt a contractionary monetary policy stance. If on the other hand, the economy exhibits deflationary tendency, that is a sustained fall in the general price level, the central bank can raise the level of money supply using appropriate instruments of monetary policy. In this case, the central bank is said to adopt an expansionary monetary policy stance.

In the light of the above discussion, a classification of monetary policy instruments, operating targets, intermediate targets, and goals are presented in the table below1.

Table 1: Monetary policy instruments, target and goals

Policy instruments	Operating targets	Intermediate targets	Goals
Open Market operations Bank/Discount rate Reserve requirements	Short-term interest rates Reserve aggregates (monetary base, reserve, non-borrowed reserve, etc.	Monetary aggregates (M1,M2,etc) Interest rates (short and long term) Aggregate demand	Low unemployment rate Low inflation rate Financial market stability Exchange rates

4. Monetary Policy Strategies

Central banks often adopt certain methods or techniques (strategies) to achieve the ultimate goals of monetary policy. This involves choosing a goal (such as inflation, nominal GDP, exchange rate, etc.) or an intermediate variable (such as the money supply and market interest rate), and setting a desirable value (or target) of the variable the central bank intends to achieve using the instruments of monetary policy. The chosen variable alongside the desired value becomes the central bank's target. If for instance, money supply is chosen as the variable, and the desired value is money supply growth rate of say 5.0 per cent, it means that the central bank should strive to ensure that money supply does not grow above 5.0 per cent using the policy instruments at its disposal. Since money supply is an intermediate variable, the understanding is that once the target is achieved, the ultimate goal of say low inflation would also be achieved. Different goals and intermediate variables can be selected by the central bank as targets. These are discussed in the sections that follow.

4.1 Monetary Targeting

Monetary targeting involves setting the target level or growth rate of monetary aggregates (such as money supply) that is considered optimal to stabilize the economy. It is believed that the achievement of the target helps promote non-inflationary growth. In theory, Milton Friedman had proposed that the targeted aggregate be set in such a way that it would allow for constant growth. Hence, monetary targeting, in practical context, involves setting appropriate benchmark from time to time at a level considered most appropriate for achieving monetary policy objectives.

Under this framework, appropriate level of growth in money supply is determined from a pre-determined level of inflation and output growth. This

flows from the assumptions that there is a stable relationship between money, output and inflation. Thus, the money supply level is consistent with the level of economic activities.

4.2 Interest Rate Targeting

Interest rate targeting is also similar to monetary targeting, but the target variable is the interest rate (mostly the short-term interest rate or interbank rate). The strategy involves setting minimum interest rate, usually the overnight interbank rate at a level considered good enough to achieve monetary policy objectives. The interest rate directly and naturally influences money supply to a point that keeps macroeconomic variables healthy when appropriately set. Other interest rates that can be targeted, depending on the country, include 'minimum one week refinancing credit rate'. In this type of monetary policy strategy, the most common instrument used by central banks is Open Market Operations (OMO) including repurchase agreements (repo and reverse repo) and/or auctions of promissory notes issued by the central banks. In practice, the level of the interest rate is determined either by the result of the periodic auctions or by unilaterally setting a minimum auction rate with the ultimate goal of restoring the liquidity condition of the banks.

4.3 Nominal Gross Domestic Product (NGDP) Targeting

In this strategy, central banks attempt to achieve a certain level of NGDP or its growth rate with the sole aim of achieving stable price level. The underlining assumption is that a fixed or targeted GDP growth rate helps to eliminate output fluctuations which in turn rescind the incentives for unrealistic and unfriendly general price level movement. In practice, central banks fix a rate of growth considered most appropriate at a pre-determined period. This benchmark then becomes the pointer to determine whether to implement contractionary monetary policy or expansionary monetary policy.

For instance, a central bank may fix NGDP growth rate at 5 per cent (potential level) if it finds that the growth rate is consistent with the market fundamentals or ideal for monetary policy operations and the economy's long run potential. Expansionary policy would be implemented in a situation where the NGDP falls below this potential level. This is because the difference between the actual and potential rate in this case indicates deflationary tendency. However, when the actual rate surpasses the potential rate, the option available to central banks is the contractionary monetary policy to return the economy to the path of stability.

4.4 Exchange Rate Targeting.

Exchange rate targeting or exchange rate peg, as it is otherwise called, is a monetary policy strategy that involves fixing the value of a national currency in terms of the currency of another nation considered strong. The measure of that nation's strength is the level of inflation rate. Thus, a nation that adopts exchange rate targeting as a monetary policy strategy simply pegs its currency to be responsive to the rate of inflation of the identified mirror country. This is so under the assumption that *ceteris paribus*, if a fixed exchange rate is sustained, the gap between the inflation rates of the two countries should even-out. This implies that the country with a high inflation rate would leverage on the low-inflation country for effective implementation of monetary policy.

In practice, exchange rate targeting can be adopted using any of the following three approaches; the currency board arrangement, fixed exchange rate, and dollarization strategies.

In the case of currency board arrangement, a country's currency is backed 100 percent by the foreign currency, and provided the high inflation country maintains a large chunk of its foreign asset in the low-inflation's currency country. Simply, the high-inflation country makes policy pronouncement of

fixing its domestic currency's value in terms of the low inflation country's and trade each other's currency on large scale.

Dollarization entails deliberate decision of the monetary authority to substitute its local currency for currency of a country assumed to be strong in terms of inflation. In other words, it is the adoption of the currency of a low inflation country as legal tender. It is believed that since the adopted currency is relatively stable, then monetary policy objective becomes effective.

4.5 Inflation Targeting

Inflation targeting is a monetary policy strategy that seeks to keep inflation, under a particular definition such as the consumer price index, within a desired level or range. It draws its weight from inflation forecasting rather than past levels. In practice the central bank, based on its monetary policy direction, determines an inflation rate target that is then compared with the forecast. Whenever, the forecast inflation rate exceeds the target, central banks would react by adopting a contractionary monetary policy stance. They adopt an expansionary policy if the reverse applies.

For inflation targeting to be effective, a central bank must be committed to the target, and have a considerable degree of autonomy. In addition, there should be no multiple monetary policy objectives. The domestic financial market must also be sufficiently deep, and there must be appropriate model for inflation forecasting as well as availability of timely and quality data/information.

4.6 Price level targeting

This is a monetary policy strategy which seeks to either keep the overall price level stable or meet a pre-determined price level. The price level used as a barometer is the consumer price index (CPI) or some similar broad measure of cost of inputs. Thus, in this strategy, the long-term objective is to achieve a

specific CPI number quite unlike inflation targeting where the objective is to achieve a given rate of change in the CPI. Nevertheless, price level targeting is similar to inflation targeting except that CPI in one year over or under the long-term price target is offset in subsequent years such that a targeted price level is reached over time.

4.7 Quantitative Easing

This is a type of monetary policy strategy that involves buying of financial assets from DMBs. This has the capacity of raising the prices of assets and lowering their yields as well as increasing money supply. The signal for this kind of policy framework comes from persistent fall in short term interest rate, particularly the interbank interest rate. Quantitative easing which is a digression from the usual practice where central banks buy short term government bonds becomes the policy option to correct the effect of the persistent fall in interest rate on the economy, and return the financial system and the economy to the path of stability. This policy option was largely deployed by most economies in the aftermath of the global financial crisis of 2007/2008.

5. The Monetary Policy Transmission Mechanism

5.1 Transmission Mechanism of Monetary Policy

Transmission mechanism of monetary policy means the process through which monetary policy actions affects domestic economic activity and the general price levels. The actual ways through which these actions impact on the economy is known as monetary policy transmission channels.

A good understanding of the various channels of monetary policy transmission helps us know the linkage between the financial and real sectors of the economy. It also helps policy makers to explain movements in financial aggregates. Furthermore, adequate information about the transmission mechanism would lead to a better choice of policy tools. It helps us to know

how the various policies transmit into the economy and through which channel.

The monetary policy transmission channels identified in the literature include the following: interest rate channel, exchange rate channel, asset price channel, and credit channel.

5.2 Interest Rate Channel

This explains how changes in the central bank monetary policy rate or bank rate affect the economy. Changes in the central bank's policy rate are directly reflected in short-term market rates. When the central bank changes the policy rate, it is expected that other rates in the short end of the money market would be affected. This is so because the policy rate is the rate at which central banks lend money to deposit money banks or commercial banks. For example, A review of the CBN's monetary policy rate (MPR) brings about increase or decrease in short-term rates such as the inter-bank call, 30- day and 90-day securities, etc. However, upward review of this rate in Nigeria tends to also raise lending rates but without a corresponding movement when the contrary is the case.

Besides affecting short-term market rates, a rise in the policy rate also pass-through to long-term interest rates, such as the bond market rates. Subsequently, with the rise in the nominal interest rates, the real interest rate also rises resulting in reduced borrowing and spending by economic agents such as households and businesses. Thus, the overall effect of the rise in the policy rate is reduced aggregate demand and eventually, domestic production.

5.3 Exchange Rate Channel

The exchange rate channel of the monetary policy transmission explains the link between the exchange rate and monetary policy actions of the central

bank. A major determinant of exchange rate is interest rate differentials between countries. Thus, whenever domestic interest rates fall below foreign interest rates as a result of monetary policy actions, the exchange rate would depreciate in order to restore equilibrium in the market and reduce arbitrage. Moreover, the depreciated exchange rate makes domestic goods cheaper than imported goods, causing demand for domestic goods and aggregate output to expand with possible rise in the general price level. Generally, the effect of the exchange rate channel is more evident in open economies operating flexible exchange rate system.

5.4 Asset Price Channel

A widely accepted economic theory is that changes in the price of assets can affect consumption and investment decisions taken by households and firms. Most of the time, economic agents use their excess funds in acquiring assets such as, equity and debt securities, foreign exchange, and real estate. Banks, for instance, sometimes use their excess reserves for asset acquisition. In addition, quite a number of households invest in certain assets and these assets usually generate a positive wealth effect for holders in that as their prices increase, their balance sheets improve. In the case of firms, equity prices affect investment decisions, and both effects can feed into the credit channel. Since these assets are held by economic agents, it affects their balance sheet positions.

The asset price channel describes the inter-connection between asset prices and monetary policy actions. In other words, it captures the effect of monetary policy actions on the prices of assets and the general economy. For example, if the central bank policy rate is increased (tight monetary policy) investors would prefer investing in debt securities than in equities due largely to the attractive interest rate offered in the debt market. Since investors prefer to utilize their excess funds in buying debt (bonds), the price of equities would fall.

Thus, the value of financial wealth of equity holders would be reduced due to revaluation of their equity portfolio which would significantly affect their consumption decisions, output, and prices.

5.5 Credit Channel

The credit channel of monetary policy transmission is the process through which monetary policy decisions affects the credit-creating ability of banks or credit market or the ability of banks to grant loans. This means that changes in the central bank's monetary policy stance is a major determinant of changes in the availability/supply of credit which in turn affects the economy. The credit channel can be sub-divided into two components depending on the effect of changes in monetary policy on either bank lending or the balance sheet.

5.5.1 Bank Lending Channel

Banks play a critical role in the financial intermediation process. The monetary policy stance and banks' cost of funds tend to influence the lending rate. An expansionary monetary policy (reduction in the policy rate, or cash reserve requirements, CRR) would allow banks to hold more deposits and expand their loanable funds. The cost of funds is expected to be lower as well as the calculated lending rates. So, banks would be able to grant loans to more households and firms thereby enhancing aggregate demand and output. In contrast, if the central bank increases the policy rate or raises the CRR, the DMBs' cost of funds will increase which will result in higher lending rates, that will be passed on to their customers. The effect is to reduce borrowing by firms and households which could then reduce aggregate demand and output through reduction in consumption and investments.

5.5.2 Balance Sheet Channel

Monetary policy often affects the financial position of private economic agents. It arises because the shifts in policy affect not only market interest rates but also, the position of private economic agents such as banks' balance

sheets, cash flows and the net worth of companies and consumers. The balance sheet channel, therefore, shows how monetary policy affects the credit portfolio of banks and other economic agents. For instance, an upward adjustment of the policy rate will result in reduced cash flow, reduced net worth, increase in lending rate, and decline in aggregate expenditure.

Also, a contractionary monetary policy will affect banks' ability to grant loans, leading to credit rationing and an increase in lending rates. The implication of the credit rationing is that borrowers, especially small borrowers with inadequate collateral to back-up their loan demand, will be unable to access a loan facility. Thus, the decline in banks' credit-creating ability may lead to adverse selection.

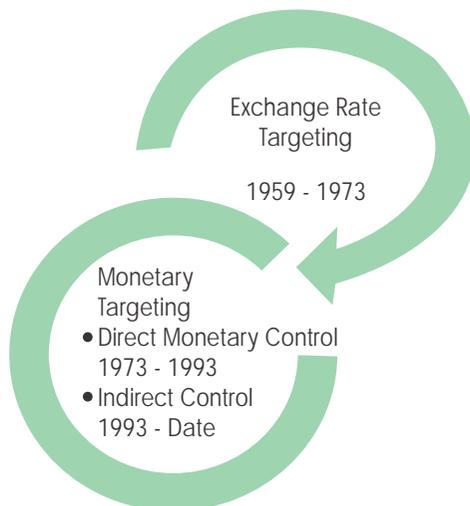
Overall, change in the policy rate affects the market value and cash flow of certain financial products. This will in turn impact on the net worth of the holders of these products. Since the net worth of holders is affected it will be reflected in their balance sheet position.

6. Monetary Policy Implementation In Nigeria

6.1 Monetary Policy Strategies in Nigeria

In Nigeria, monetary policy has evolved over the years to cover both the direct and indirect era, with adoption of exchange rate target (1959-1973) and monetary targeting (1973-date) strategies. However, independent monetary policy did not commence till 1979. By 1993, the CBN switched to the indirect approach to monetary policy. This switch neither precluded nor changed the goals of monetary policy: achievement of domestic price and exchange rate stability; maintenance of a favorable balance of payments position; development of a sound financial system; and promotion of rapid and sustainable rate of economic growth.

Figure 1: Monetary Policy Strategies in Nigeria



The current operational framework for monetary policy management in Nigeria involves the use of market (indirect) instruments to regulate the growth of major monetary aggregates and management of the exchange rate. Under this framework, only the operating variables, the monetary base or its components are targeted, while the market is left to determine the interest rates and allocate credit.

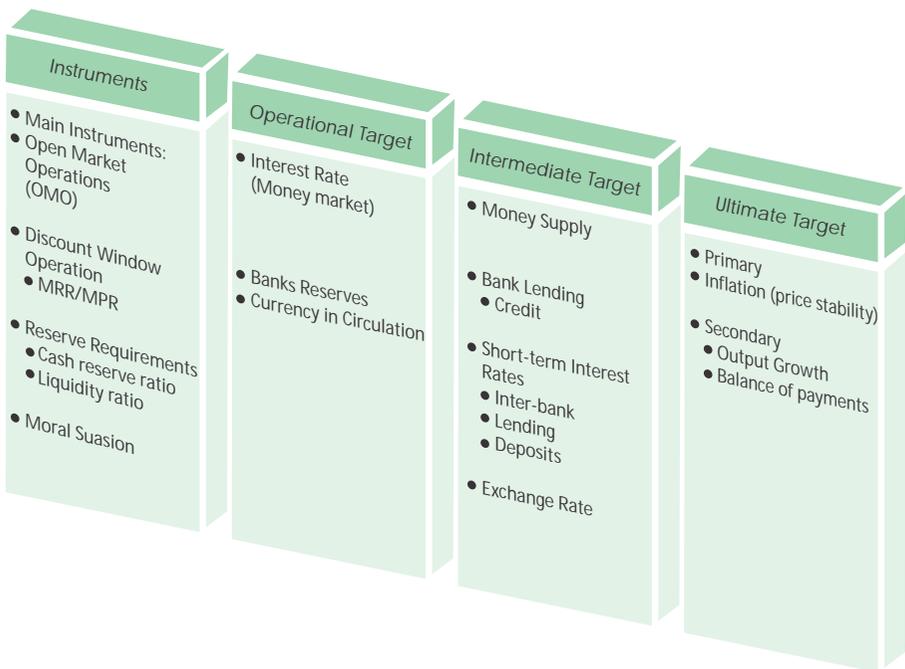
Essentially, the framework involves estimating (ex-ante) the optimal monetary stock, which is deemed consistent with the pre-determined targets for GDP growth, the inflation rate, and external reserves. Thereafter, market instruments are used to affect banks' reserve balances as well as their credit creating capacity.

6.2 Instruments of Monetary Policy in Nigeria

There are two groups of instruments, the direct and the indirect instruments. The direct instruments which were broadly used between 1959 and 1986 included credit ceiling (placing limit on credit expansion by banks), sectoral credit

allocation (setting minimum proportion of banks' loans that could be extended to different sectors of the economy), administrative control (or fixing) of interest and exchange rates; moral suasion, etc. The indirect instruments, commonly referred to as market-based instrument, consist mainly of Open Market Operation (OMO), and require a well-developed and functional financial markets to be effective.

Figure 2: Monetary Policy: Instruments and Targets



OMO is often complemented by the discount window operations and cash reserve requirement (cash reserve ratio and liquidity ratio), when liquidity management is a major issue. At the initial stage of the indirect monetary policy era, the anchor for the CBN's monetary policy was the minimum rediscount rate (MRR). The MRR was supposed to anchor short term interest rates in the financial system. It was meant to be an indicative rate that would

signal the direction of interest rate and monetary policy. Between 1999 and 2005 the Monetary Policy Committee, the MPC, adjusted the MRR in line with monetary conditions. Unfortunately, the MRR was not effective as an anchor rate due to the problem of liquidity overhang that persisted in the banking system over the years, as a result of the excessive fiscal operations of governments prior to 1999. It failed to exert immediate impact on short-term rates. The rates in the money market remained largely volatile leading to inefficiencies in the money market. The MRR could not also transmit monetary policy effectively. In order to establish a truly transactions policy rate that will effectively signal the direction of monetary policy and smoothen the volatility in the money market rates, a new framework for implementing monetary policy was introduced.

Under the new monetary policy framework which commenced in December 2006, the MRR was replaced by the Monetary Policy Rate (MPR) which was thought would better anchor short-term interest rate, particularly the overnight inter-bank interest rates. The lingering problem of interest rate volatility was addressed through 'averaging of reserve requirements over a maintenance period of two weeks' and the discount window (Standing Lending and Deposit Facilities) to define an interest rate corridor that would drive interest rates in the money market. The Standing Lending Facility created opportunity for DMBs with liquidity problems to borrow from the CBN, while the Standing Deposit Facility provided opportunity for DMBs to deposit excess funds with the CBN. The interest rates at the discount windows revolved around the MPR corridor – interest rate corridor.

7. The Institutional Framework For Monetary Policy In Nigeria

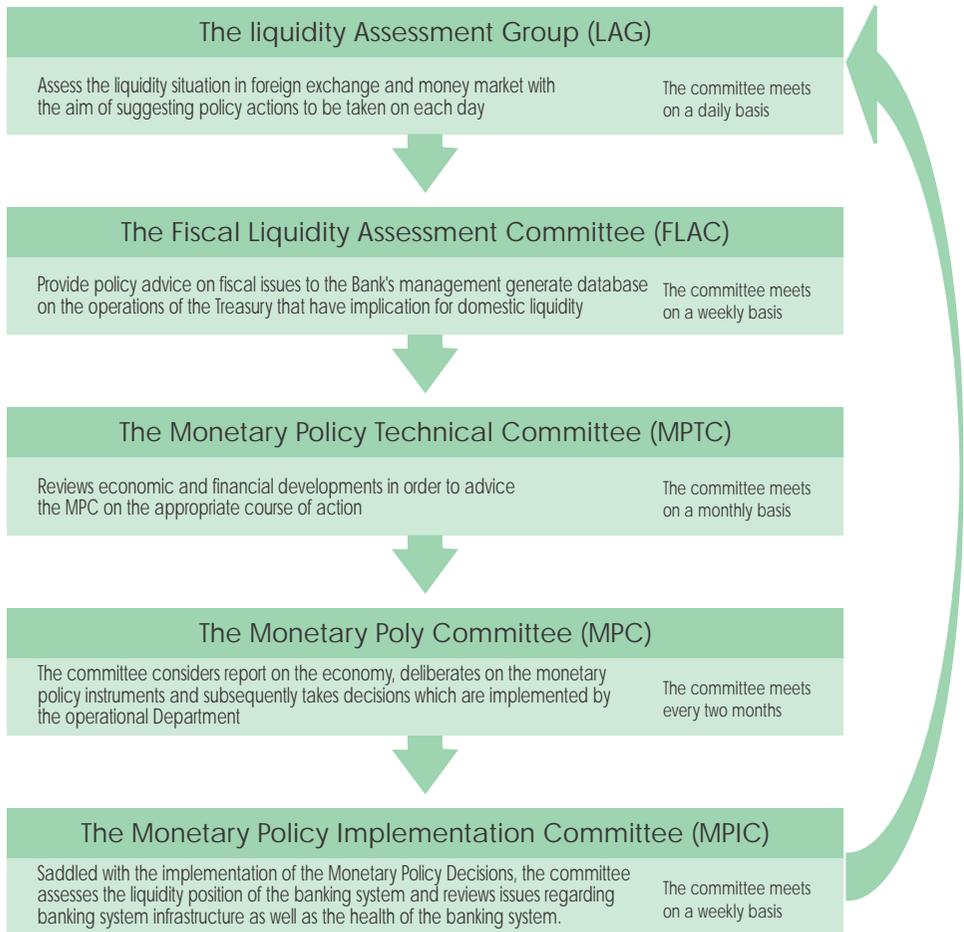
7.1 The Institutional Framework for Monetary Policy in Nigeria

Generally, a monetary policy framework comprises “the institutional

arrangement under which monetary policy decisions are made and executed” (McNees, 1987:3 cited by Fry, 2000). In Nigeria, the institutional arrangements for the conduct of monetary policy are derived from the various CBN Acts. Prior to 1999, decisions on monetary policy and its implementation rested solely with the Management of the CBN. However, in the post 1999 period, with the instrument autonomy granted the Bank, the Monetary Policy Committee (MPC) was put in place to deliberate on the monetary and other economic conditions and take appropriate decision, generally called monetary policy decisions. The MPC, as indicated in the CBN Act of 2007, is charged with the responsibility for formulating monetary and credit policy. It is expected to (i) facilitate the attainment of price stability, and (ii) support the economic policy of the Federal Government. The MPC consists of twelve members with the Governor of the CBN as the chairman. Other members include the four Deputy Governors of the CBN, two members of the CBN Board, three appointees of the President of the Federal Republic of Nigeria, and two appointees of the Governor of the CBN.

THE MPC is assisted by different institutions and committees that perform different but complementary roles in the formulation and implementation of monetary policy. The institutional arrangements for monetary policy formulation and implementation in Nigeria include the: Liquidity Assessment Group (LAG), Fiscal Liquidity Assessment Committee (FLAC), Monetary Policy Technical Committee (MPTC), and Monetary Policy Implementation Committee (MPIC). Members of these committees are drawn from different departments in the CBN, Ministry of Finance, Office of the Accountant General of the Federation, the Nigeria National Petroleum Corporation (NNPC), Nigerian Customs Services (NCS), and the Federal Inland Revenue Service (FIRS), among others. The functions of these committees are summarized in the chart below.

Figure 3: Monetary Policy Institutional Framework



8. Other Issues In Monetary Policy

8.1 Monetary Policy and Economic Growth

Policymakers often claim that effective monetary policy is essential for economic development, while other stakeholders seek to know how exactly monetary policy supports growth. To enable proper understanding of the role of monetary policy in economic development, it is important to appreciate

the fact that monetary policy deals with the whole economy but not just a single economic unit and that policy actions take time before their effects are felt. Economic growth is often measured by the gross domestic product (GDP) which is itself the market value of all goods and services produced in a country within a given period (annual, quarter, etc). Monetary policy affects growth in many ways. Recall that monetary policy, among other objectives, aims to ensure price stability, which implies making sure that the inflation rate is low and does not change frequently. If prices are stable it will be easy to plan investment and consumption so that economic actions are orderly. In this circumstance, it is also easy to save and because investment depends, in part, on savings it will be easy to build infrastructure and other amenities that support growth.

Another way monetary policy supports growth relates to its effect on the cost and availability of credit. The cost of credit to investors and consumers could be influenced by central banks increasing or reducing the interest rate at which it lends to banks (that is MPR). If policy rate is reduced, it is expected that banks would also reduce their lending rates so that money becomes cheaper for investment and consumption, which in turn increases business activity thereby supporting economic growth. It is not just reducing interest rate that supports growth. If the central bank increases interest rate, it is expected that the currency in use in the economy would appreciate compared to foreign currencies. This could have a positive effect on growth of the economy by making the economy attractive to foreign investors, leading to capital flows into the economy. Capital flows are important because, for most developing countries, the savings generated from within the country are often not enough to support the growth so that the foreign investments add to the home savings to support large development projects. In this case, the central bank would have compared the effect of increasing interest rate with that of reducing it

and come to the conclusion that it would be more gainful to the entire economy to take any particular action.

In addition to reducing the cost of credit, some central banks engage in direct allocation of credit to selected sectors which are considered important for the development of the economy. For instance, if the central bank finds that the agricultural sector will better enhance the growth of the economy, it could direct deposit money banks to dedicate certain percentage of their loans to agriculture. This could come as a 'law' or guideline or through moral suasion in the form appeal to banks. In other circumstances, the central bank could intervene directly by supplying the money it wants to be channeled to any chosen sector.

8.2 Monetary Policy and Inflation

Every day and everywhere inflation is mentioned but difficult to understand. It has received attention, mainly, because it is distortionary to the economy when it is high. Inflation is critical because it is a monetary phenomenon and associated with increase in money supply. Simply, inflation describes a situation where general prices increase continuously. It is important to note that the increase in prices refers to the 'general not an individual item. So it is possible to compare the price of tomatoes over a given period and find that it has increased, while at the same time the National Bureau of Statistics reports that inflation has reduced in the same period. Inflation is measured in different ways but the most popular is the consumer price index (CPI). The percentage change in the CPI is the inflation rate. The CPI could be compared over one year, over preceding month or on moving average basis to arrive at inflation rate.

Inflation could be headline that is including all items, or core meaning the headline inflation minus the items in which their prices change very frequently.

Whatever the type of inflation, central banks see inflation as a monetary phenomenon, that is to say that it is the change in money supply that influences the level of inflation. Specifically, if money supply increases faster than the supply of goods and services, inflation would increase. Therefore, to reduce inflation, the central banks deploy instruments to bring down the quantity of money supply. Some of these instruments have been discussed previously. For emphasis, recently, most central banks use policy interest rates to counter inflation, increasing it when inflation rises or is expected to rise and doing the opposite when inflation falls.

8.3 Monetary Policy and Government Revenue

Government revenue is traditionally discussed under fiscal policy. However, because the monetary and fiscal authorities belong to the same government, there is often an attempt at coordinating both policies for the greater good of the economy. Not only that, there are considerable overlap of monetary and fiscal policies in the management of government revenue. The government often raises resources from debt issues which are traditionally underwritten by central banks, while central banks use the debt instruments to conduct monetary operations. Also, central banks often give loans to the government to support its operations, the so called Ways and Means Advances.

There is also a unique connection between government revenue and monetary policy in Nigeria. The receipts from crude oil sales, for instance, are a large proportion of government revenue. As they are received in dollars, the central bank would convert them to naira and transfer to the federation account for sharing among the various tiers of government. This process is called monetization. Because monetization affects money supply, the central bank always puts in place a mechanism to ensure that the shared revenues do not obstruct the orderly growth of money supply that could otherwise cause inflation. It is the exchange rate of the naira that determines how much in naira

a particular receipt from crude oil sales is worth. If the naira appreciates vis-à-vis other foreign exchange, the amount received from sharing the oil revenues would fall, while depreciation would imply that the number of units of local currency (naira) per foreign currency received by government would increase.

8.4 Monetary Policy Communication

Monetary policy in Nigeria has evolved steadily over time. One major evolution in the last decade has been the tendency towards transparency. This is understandable because it is common sense that policies would have more support if stakeholders understand why certain actions are taken. This understanding comes from effective communication by central banks. So communication refers to the various ways and forms in which central banks explain to the public their objectives, means of achieving them, and actual achievements. Communication is powerful because it affects the financial markets, moulds expectation about future policy direction that is important for guiding investment and consumption decisions.

There are several means of monetary policy communication. Most central banks make public, decisions taken at Monetary Policy Committee meetings in press conferences. Yet others make public, minutes of meetings of MPCs. There are also rounds of enlightenment campaigns, policy fora, brainstorming sessions and educational series publications like this issue that are used to communicate monetary policies. 'Over the last two decades, communication has become an increasingly important aspect of monetary policy. These real-world developments have spawned a huge new scholarly literature on central bank communication -- mostly empirical, and almost all of it written in the last decade. The evidence from this growing literature suggests that communication can be an important and powerful part of the central bank's toolkit since it has the ability to move financial markets, to enhance the predictability of monetary policy decisions, and potentially to

help achieve central banks' macroeconomic objectives. However, the large variation in communication strategies across central banks suggests that a consensus has yet to emerge on what constitutes an optimal communication strategy' (Blinder et al, 2008)

8.5 Monetary Policy and You

Although monetary policy belongs to the macro-economy, it does have implications for individuals and businesses. This can come in many ways. First, from lending and deposit rates, monetary policy could influence the decision to invest and consume. If the action of the central bank causes banks' interest rate to fall, it will become attractive to increase purchase of consumer durable goods (for instance) compared to when interest rates are high. Also, increased interest rate could cause a deferment of current consumption with preference given to investment especially savings. Monetary policy could also determine whether locally or foreign goods are consumed or used as input for production. For instance, a monetary policy action that depreciates the naira would, all other things being the same, increase the cost of imports and discourage their consumption.

Above all, the role of monetary policy in curtailing inflation affects individuals directly. If monetary policy is successful in checking inflation, individuals will be able to save and plan for future consumption and investment, and fixed income earners will retain the value of their income over time. In an inflationary condition, individuals cannot enjoy these opportunities.

8.6 Challenges to Monetary Policy in Nigeria

The challenges to the effective implementation of monetary policy include the following:

- a) Operating Cost – This mainly refers to the cost of liquidity management. The central bank when it sells or buys securities incurs some cost in interest payments. Also, when banks make deposits in

the central bank, interest is paid on all or some part of the deposits. The ability of the central bank to maintain a desired level of liquidity in the economy would be affected by the amount of resources available for interest payments, and for meeting other cost of liquidity management.

- b) Fiscal Dominance – As the name implies, this relates to the domination of monetary policy by government revenue and expenditure activities. It is often the case that when the central bank wants to reduce money supply in the economy in order to contain inflation pressures, the government continues to engage in expenditure patterns that cause money supply to increase. This, makes the achievement of the objectives of monetary policy, particularly low inflation difficult.
- c) Structural Rigidities – This concerns factors that inhibit the free flow of resources between producers and consumers. These factors often lead to artificial price increases that have not arisen because money supply grows faster than the production of goods and services. Such factors may include poor infrastructure and market cartels. In the presence of these factors, even if policymakers are able to ensure appropriate policies, they do not reach the targeted objectives.
- d) External Shocks – These are external shocks that affect monetary policy through the foreign exchange rate of the naira. Developments like decline of crude oil price at the international oil market that cause exchange rate depreciation often limits monetary policy's ability to achieve the price stability objective. This is because exchange rate depreciation leads to increase in prices of imported goods which in turn lead to a rise in the domestic price level.

References

- Agbonkhese, A. O. and M. O. Asekome, (2013) The Impact of Monetary Policy on Bank Credit Creation in Nigeria: (1980 – 2010). *International Journal of Business and Social Science* Vol. 4 No. 15, 1-6.
- Black, L. K. Hancock, D. and W. Passmore (2010) The Bank Lending Channel of Monetary Policy and Its Effect on Mortgage Lending. Finance and Economics Discussion Series working paper, Federal Reserve Board, 2010-39, 1-38.
- Blinder, A. S., Ehrmann, M., De Haan, J., and D. Jansen (2008) Central bank Communication and Monetary Policy: A Survey of Theory and Evidence. *Working Paper Series No. 898*, European Central Bank.
- Central Bank of Nigeria (2011). What is Monetary Policy? *Understanding Monetary Policy Series No 1*.
- Cochran, J. P. Call, S. T., and F. R. Glahe (1999) Credit Creation or Financial Intermediation?: Fractional-Reserve Banking In A Growing Economy. *The Quarterly Journal of Austrian Economics* vol. 2, no. 3: 53–64.
- Fry, M. (2000). Key Issues in the choice of Monetary Framework. In *Lavan Mahadeva and Gabriel Sterne (eds): Monetary Policy Frameworks in a Global Context*. Routledge. London.
- Gambacorta, L. and D. Marques-Ibanez (2011), "The bank lending channel: Lessons from the crisis. *BIS Working Papers No 345*, 1-32.
- George, E., King, M., Clementi, D., Budd, A., Buiter, W., Goodhart, C., Julius, D., Plenderleith, I., and J.Vickers, (1999). The transmission mechanism of monetary policy. The Monetary Policy Committee. Bank of England 1-12.

Handa, J. (2009) Monetary Economics, 2 Edition, Routledge, London and New York.

Ireland, P. N. (2006) The Monetary Transmission Mechanism. Federal Reserve Bank of Boston Working Papers No. 0601, 1-13.

Kuttner, K. N. and P. C. Mosser (2002) The Monetary Transmission Mechanism: Some Answers and Further Questions. Federal Reserve Bank New York Economic Policy Review, 15-26.

Nnanna, O. J., (2001). The monetary policy framework in Africa: The Nigerian experience. <https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/57/Nigeria.pdf>.