



CENTRAL BANK OF NIGERIA

**UNDERSTANDING
MONETARY POLICY SERIES
NO 1**

WHAT IS MONETARY POLICY?

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Aims and Scope

The *Understanding Monetary Policy Series* is designed to improve monetary policy communication as well as economic literacy. The series attempts to bring the technical aspects of monetary policy closer to the critical stakeholders who may not have had formal training in Monetary Economics. The contents of the publication are therefore, intended for general information only. While necessary care was taken to ensure the inclusion of information in the publication to aid proper understanding of the monetary policy process and concepts, the Bank would not be liable for the interpretation or application of any piece of information contained herein.

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Correspondence

Enquiries concerning this publication should be forwarded to: Director, Monetary Policy Department, Central Bank of Nigeria, P.M.B. 0187, Garki, Abuja, Nigeria, E-mail: info.dmp@cbn.gov.ng

Central Bank of Nigeria

Mandate

- Ensure monetary and price stability
- Issue legal tender currency in Nigeria
- Maintain external reserves to safeguard the international value of the legal tender currency
- Promote a sound financial system in Nigeria
- Act as banker and provide economic and financial advice to the Federal Government

Vision

To be one of the most efficient and effective of the world's central banks in promoting and sustaining economic development.

Mission Statement

To be proactive in providing a stable framework for the economic development of Nigeria through the effective, efficient and transparent implementation of monetary and exchange rate policy and management of the financial system.

Core Values

- Meritocracy
- Leadership
- Learning
- Customer - Focus

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CHAPTER 1

BASIC CONCEPTS

1.1 Basic Monetary Concepts

Our attempt to enhance an understanding of monetary policy begins with the basic concepts. Large sections of the vocabulary used in monetary policy are generally universal i.e. not requiring any specific application to a particular country. However, there still exist some of the terms in the monetary policy literature that are country-specific and therefore, need to be defined in the context of the country in which the terms are used. In the **Understanding Monetary Policy Series**, we shall endeavour to proceed from general to specific as we explain terms that have more generic applications and those that have country-specific relevance.

An underlying philosophy is that monetary policy is a dynamic field, as such, changes are continua. While theories are being constantly challenged in the light of new research, old ones are being subjected to new empirical investigations using the advantages of progress in information communications technology and computerised econometric software. Besides, globalization has compelled the introduction of new financial terms in the economic lexicon with varying degrees of understanding and interpretation. Our approach is to maintain a middle-of-the-road approach with a little bit of conservatism as we attempt to present in a lucid manner, contending issues of relevance to monetary policy.

1.2 What is Money?

“It is not any scarcity of gold and silver, but the difficulty which such people find in borrowing and which their creditors find in getting payment that occasions the general complaint of scarcity of money”- Adam Smith, *Wealth of Nations* (1776) Book IV.

The term ‘money’ means different things to different people. To a non-economist, money is the income received at the end of a period. For instance, to the landlord, it is the rent collected from tenants; and to the trader, it is the notes and coins used in buying and selling. To the latter, however, money is not income received or rent paid, but anything that is generally accepted as a medium of exchange. As noted by

Money is anything that is generally accepted as a medium of exchange

Adam Smith in the *Wealth of Nations*, although money and wealth are used in everyday language as synonymous, in Economics, wealth is created in an economy through the production and exchange of goods and services. Here, money performs two roles. It facilitates the exchange of goods and services and expresses in a single unit of measurement, the value of the goods and services created by society. In this context, we are talking about the distinction between real values and money or nominal values. Thus, although wealth can be expressed in monetary terms, wealth and money are not synonymous. What then is money?

According to the *Chambers Dictionary*, money is current coin i.e. pieces of stamped portable metal used in commerce as a medium of exchange and measure of value. The term is applied occasionally by extension to any object or any material serving the same purposes as coin. In modern usage, the term is commonly applied indiscriminately to coin and to such promissory documents representing coin (especially government and bank notes) as are currently accepted as media of exchange. It may also imply a denomination of value representing a fraction or a multiple of the value of some coin.

Money is also considered in reference to its value or purchasing power, that is, property or possessions of any kind viewed as convertible into money or having value expressible in terms of money. It can be used with a demonstrative or possessive adjective designating a sum applied to a particular purpose or in the possession of a particular person. In this way, money is considered as a commodity in the market (for loan, etc), one's pay: wages, salaries, etc. The dictionary definition of money tells us that it does not merely consist of coins but opens the space to include any item that is generally acceptable in exchange for goods and services.

Currency is defined as anything that circulates from person to person in the process of exchange and so we can agree that money takes a variety of forms. Defining money to be anything that is generally accepted in payment of goods and services leads us to the next level of our definition of money i.e. payment can occur without the physical transfer of assets e.g. use of bank cheques, debit and credit cards to consummate transactions and transfer funds from one account to another. The impression is that the cheque, debit or credit cards are **not** money; but the underlying bank deposits that gave rise to the transactions. Thus, the exchange is validated because of the circulation of the bank deposit to which the cheques and debit cards refer. Money in this sense therefore, ceases to be income or wealth.

Money therefore, refers to any asset acceptable in exchange for goods and services. However, this makes the demand for money only a derived demand. This is so because the demand refers to goods and services and money is only needed to bring the demand into effect in carrying out the act of exchange. A problem arises in deciding those goods that are of general acceptability. General acceptability of goods and commodities as money takes different forms and shapes as you move from society to society.

As we can see, money as defined here is synonymous with wealth; but this does not convey the Monetary Economist's definition. In economics, money is defined by its use in commerce or exchange i.e. as a medium of exchange or a means of payment. In other words, money is the most liquid part of wealth i.e. that part of wealth which can readily be exchanged for goods and services. The ordinary meaning of money ignores the fact that money in primitive societies took the form of commodities: commodities that had intrinsic value but came to be used in the process of exchange because they had a number of attributes that made them acceptable in that process. Such characteristics were found mostly in precious metals and it was convenient to turn them into coins of predetermined weight.

In all modern definitions of money, commodity money is ignored. The notion of commodity money conveys the impression that money is essentially abstract since any asset or commodity potentially possesses monetary attributes. To the extent that money serves as a unit of account, the abstract nature of commodity money is preserved in modern money since the use of money allows the value of different goods and services to be expressed in a common unit of account or numeraire whether exchange takes place or not.

In a market economy, money is an important means of exchange and facilitates specialization. Generally, money serves three distinct purposes: medium of exchange, store of value and unit of account or standard of value. Money as a medium of exchange is accepted in payment for goods and services as well as debts. Money as store of value is held for future purchases, while money as standard of value is used as yardstick for measuring the prices of goods and services.

As money is generally used by nearly every member of society, it should be easily recognized by the entire members of the society. The general acceptance of money by the population would depend on, as much as possible, the ability to sustain its purchasing power, which is more of a reflection of the economic environment rather than its own inherent value.

1.3 What are the Components of Money?

What constitutes money has evolved over the years through the conduct of transactions in the economy. Precious metals such as gold and silver were used as means of payment or exchange and served as the main forms of money. Later, paper money in form of currency notes and cheques served as means of payments. Paper notes that were convertible to precious metals were used as money backed by law. In modern times, notes are no longer backed by metals. These notes are called 'fiat' money. Fiat money is paper money legally backed by the government of a country as a generally acceptable means of exchange for goods and services. The authority to issue such money is delegated to a government agency like the central bank or the ministry of finance.

Money is made up of cash (notes and coins), demand deposits (DD) and other deposit balances. The cash component consists of balances held in the vaults of deposit money banks (DMBs) and the notes and coins in circulation (CIC) with the rest of the public. The demand deposits consist of the current/cheque accounts held in deposit money banks that can be withdrawn on demand. Other deposit balances comprise time, savings and foreign currency. These components constitute the money supply of a country at any point in time.

1.4 What is Money Supply?

Money supply is the amount of money that is available to the economy at any point in time. Money supply could be defined both in narrow and broad terms, depending on the ease with which it could be converted into cash. A narrow definition of money supply comprises currency in circulation and demand deposit, while a broader definition would include balances in other deposit accounts. In Nigeria, narrow money (M1) consists of the currency in circulation plus demand deposits while broad money (M2) is made up of narrow money plus savings, time and foreign currency deposits. The definition of what constitutes narrow or broad money depends to a large extent on the level of development of financial infrastructure and its deployment.

1.5 What is Monetary Policy?

Monetary policy is a deliberate action of the monetary authorities to influence the quantity, cost and availability of money credit in order to achieve desired macroeconomic objectives of internal and external balances. The action is carried out through changing money supply and/or interest rates with the aim of managing the quantity of money in the economy. The importance of money in economic life has made policy makers and other relevant stakeholders to accord special recognition to the conduct of monetary policy. The Central Bank of Nigeria is the organ that is responsible for the conduct of monetary policy in Nigeria

Monetary policy can either be expansionary or contractionary, depending on the overall policy thrust of the monetary authorities. Monetary policy is expansionary when the policy adopted by the central bank increases the supply of money in the system and contractionary, when the actions reduce the quantity of money supply available in the economy or constrains the growth or ability of the deposit money banks to grant further credit. The primary objective of monetary policy is the realization of stable non-inflationary growth. This gives the citizens confidence in the future value of their money, so that they can make sound economic and financial decisions. Low and stable inflation also helps to prevent inflationary boom and bust cycles that could result in a recession and higher unemployment.

1.6 Price Stability and Monetary Policy

The major objective of monetary policy for most central banks is the attainment of price stability. An associated objective is stable growth with full employment (accompanied by stable long-term interest and real exchange rates). In pursuit of the objective of price stability and its accompanying objectives, central banks recognize the existence of conflicts amongst the objectives and the need for trade-offs.

Monetary policy can be expansionary or contractionary.

Nigeria's monetary policy strategy is anchored on the attainment of internal balance and external viability. This philosophy has evolved in terms of techniques and instruments. In recent times, the CBN recognized that achieving stable prices would require a continuous reassessment and evaluation of its monetary policy implementation framework to enable it respond to the ever-changing economic and financial environment.

Against the requirement for internal and external balance, the CBN announced a new monetary policy framework effective 11th December, 2006. The goal of the new implementation framework was to achieve a stable value of the domestic currency through stability in short-term interest rates around an "Operating Target" - the interest rate, which is determined and operated by the CBN. The "Operating Target" rate i.e. the "Monetary Policy Rate" (MPR), serves as an indicative rate for transaction in the money market as well as other Deposit Money Banks' (DMBs) retail interest rate.

The operating principle guiding the new policy is to control the supply of settlement balances of banks and motivate the banking system to target zero balances at the CBN, through an active interbank trading or transfer of balances

at the CBN. This is aimed at engendering symmetric treatment of deficits and surpluses in the settlement accounts, so that for any bank, the cost of an overdraft at the CBN would be equal to the opportunity cost of holding a surplus with the Bank. The intervention in the market was to take the form of a standing lending/ standing deposit facilities that ensured an orderly operation of the market.

Monetary Policy Transmission



1.7 Who Conducts Monetary Policy in Nigeria?

The Central Bank of Nigeria through the Monetary Policy Committee (MPC) conducts monetary policy. The MPC is statutorily charged with the responsibility for the conduct of the monetary policy of the Bank. The MPC uses the instruments of monetary policy available with the Bank to effect changes in the liquidity of the deposit money banks to affect the supply of money. Often the MPC takes monetary policy decisions through tinkering with the Monetary Policy Rate (MPR) in order to affect short-term interest rates. The CBN does this by altering the target for the overnight interest rate — the rate financial institutions charge each other for overnight loans. A change in the target rate leads to changes in other interest rates, thereby affecting everyone's spending and borrowing decisions. The target rate is set periodically and reassessed at the subsequent MPC meeting.

Central Bank of Nigeria through its Monetary Policy Committee (MPC) conducts monetary policy

The CBN Act, 2007 provides for the constitution of a Monetary Policy Committee (MPC). The Committee comprises 12 members the Governor as the Chairman, four Deputy Governors, two members of the Board of Directors of the Bank, three members appointed by the President and two members appointed by the Governor.

Other committees set up to facilitate the success of monetary policy are Monetary Policy Technical Committee (MPTC) which meets prior to the MPC meetings, to review and make final inputs to the Economic Report for the MPC, Monetary Policy Implementation Committee (MPIC) meets weekly to review and monitor policy implementation, the Fiscal Liquidity Assessment Committee (FLAC)

and Liquidity Assessment Group (LAG). FLAC has the mandate to design and regularly update the framework for obtaining information for forecasting fiscal liquidity, while LAG takes decisions on intervention in the financial markets - the domestic money and foreign exchange markets.

CHAPTER 2

THE OBJECTIVES OF MONETARY POLICY

2.1 The Objectives of Monetary Policy in Nigeria

The objectives of monetary policy may vary according to the level of development of the economy involved, but invariably; they include the attainment of price stability, maintenance of external payments equilibrium, as well as promotion of employment and output growth, and sustainable economic development. Irrespective of the type of economy, these objectives are critical for the attainment of internal and external balance and ultimately the promotion of long-run economic growth. Where the stability of the financial system is threatened, these short and long term objectives could be subordinated to the overriding objective of achieving financial stability.

In pursuit of the provisions of the CBN Act 2007, the primary objective of monetary policy has remained the maintenance of monetary and price stability. Generally, the monetary policy of the CBN is anchored on four main pillars:

- (i) Inflation as a monetary phenomenon;
- (ii) The public's expectation of future inflation (this is crucial in the setting of current wages and prices). A corollary to this is that there is no long-run trade-off between unemployment and inflation; to anchor expectations;
- (iii) Proactive and rule based monetary policy (for instance, under the Taylor rule, for monetary policy to stabilize prices, the nominal interest rate must be raised by more than the level of inflation); and
- (iv) The need for monetary policy to be undertaken outside the control of the political authorities i.e. independence of the central bank to conduct monetary policy.

CHAPTER 3

MONETARY POLICY FRAMEWORK/STRATEGIES

3.1 The CBN's Monetary Policy Framework

A major distinguishing feature of a central bank from other financial institutions is the formulation and implementation of monetary policy. This is predicated on the use of monetary policy as a tool to enhance the macroeconomic environment generally and in particular to nurture the evolution of a dynamic, efficient and strategic financial system that would promote economic growth.

There are different strategies used by central banks in the conduct of monetary policy. These strategies affect the operating, intermediate and ultimate targets through different channels. The common strategies include; monetary targeting, interest rate targeting, exchange rate targeting, nominal gross domestic product or output targeting and inflation targeting.

Since inception, the CBN has used two frameworks for the implementation of its monetary policy namely: exchange rate targeting and monetary targeting. Exchange rate targeting framework was used between 1959 and 1974, while monetary targeting has been in use from 1974 to date. The shift to monetary targeting was largely informed by the collapse of the Bretton Woods system of fixed exchange rates in 1972 and a change in strategy to demand management as a means of containing inflationary pressures and balance of payments imbalances.

3.2 Monetary Targeting

Monetary targeting is one of the traditional strategies of monetary policy. It involves targeting one of the monetary aggregates such as money supply or any other measure of money stock as the intermediate variable through an operational target in order to impact the ultimate objective i.e. inflation.

The use of monetary targeting as a framework of monetary policy means a central bank announces a certain target for the annual rate of growth of the monetary aggregate of choice. The central bank is therefore responsible for achieving the target. In Nigeria, the central bank tries to control base money (as the operating variable) using the accelerator and multiplier principle. The base money is the liability of the central bank comprising currency in circulation plus DMBs' reserves with the central bank. The reserves are further broken down into legally required reserve and other reserves voluntarily kept as buffer stock. The

monetary aggregate as a nominal anchor performs well provided the assumption of stable multiplier and income velocity of money holds.

The attraction of the use of monetary targeting lies in its advantages including allowing central banks to cope with domestic considerations, for example inflation rate and/or output growth, in solving the monetary policy question. Others include its ability to immediately signal monetary policy stance and help fix inflation expectations; and accountability of central banks. It is easy to implement under direct and market-based systems of monetary policy regimes even in under-developed financial markets. Its quantitative nature makes it a ready benchmark in many countries' monetary programme, especially when involved in stabilization or other programmes with the International Monetary Fund (IMF).

A major short-coming of monetary targeting is that its efficacy depends on a strong, predictable and reliable relationship between output/income and base money. If the relationship is weak, monetary targeting would not work. For instance, the assumed stable relationship between money supply and nominal GDP as measured by income velocity may not exist especially in the short-run in some countries, including developed economies.

3.3 Interest Rate Targeting

Interest Rate Targeting involves making the interbank rate the anchor rate for monetary policy. In this case, the central bank targets the interbank rate which it uses as the policy rate. Under the regime, the central bank stabilizes the rate with the use of repo and reverse repo operations. Thus, short term liquidity shortages which often lead to gyrations of the interbank rate are evened out with repo operations which restore the liquidity condition of the banks. Reverse repo operations are also used for similar purposes.

The understanding is that the interbank rate functions both as an operating instrument and also as an operating target. Changes in the operating target are expected to impact the intermediate target (broad money, bank reserves, etc) in the desired direction (through the interest rate channel). Such changes will ultimately impact on the ultimate target (inflation) in the desired direction.

3.4 Nominal Gross Domestic Product Targeting

Nominal Gross Domestic Product (nominal GDP) targeting is a monetary policy strategy based on the assumption that the monetary base can be influenced to keep nominal GDP close to a path consistent with price stability. This school of thought relies on the philosophy that price stability is better achieved with the adoption of monetary policy rules. Such rule, it is further argued, would maintain

price stability without inhibiting long term economic growth. The proponents of this strategy conclude that as long as the monetary authorities play by the rules, price stability would be achieved.

This process entails the central bank setting specific targets in terms of a variable or variables that the monetary authorities can monitor. Such variables as M1, M2 or long term interest rates, are useful. However, the GDP should be interpreted as nominal (and its decomposition, into prices and output), and not as money stock or interest rates. The following factors are relevant to output targeting:

- GDP is the ultimate target or goal; and
- No single variable can be used to properly gauge the impact of monetary policy on GDP.

The procedure involves a combination of variables that influence the course of GDP growth. Proponents of GDP targeting also recognize the existence of an intermediate target, but maintain that as a goal, the monetary authorities only need the intermediate targets to get at the GDP objective. The implicit nominal anchor strategy does not rely on a money-inflation relationship. Rather, the central bank is saddled with dual mandates, for instance; to maintain the long run growth of the economy and growth in credit aggregates commensurate with the economy's long-run potential to increase production, so as to promote effectively, the goals of high employment, stable prices and moderate long-run interest rates. The greatest drawback of an implicit nominal anchor strategy as a framework of monetary policy is its lack of transparency which more often than not keeps the market guessing on the thrust of monetary policy.

3.5 Exchange Rate Targeting

Exchange rate targeting is also known as exchange rate peg. It refers to the fixing of the value of the domestic currency in respect of another low inflation currency. The strategy had its origins in the pre - World War I era, when the gold standard was in use. At that time, the currencies of most countries were convertible directly to gold at fixed exchange rates.

In recent times, exchange rate targeting involves the fixing of the value of a domestic currency to another called the anchor currency. The choice of the foreign currency to which the domestic currency is anchored usually depends on the relative stability and low rate of inflation of that country as well as the relative weight of its trade in the anchoring country's international trade with the anchored country's currency.

Alternatively, a crawling target or peg may be adopted when a country depreciates its currency at a steady rate as long as the rate of inflation is higher than the level in the anchor country. Two variants of exchange rate targeting have been identified in the literature, viz: currency board and dollarization.

Under the currency board system, a country's currency is 100 per cent backed by a foreign currency. This implies that the country's monetary authorities or government maintains a fixed exchange rate to the foreign currency and stands ready to exchange domestic currency for the foreign currency at the established exchange rate. Unlike the typical fixed exchange rate that still allows some level of discretion in the conduct of monetary policy, a currency board arrangement presupposes that monetary policy is completely taken out of the hand of the monetary authorities.

Dollarization occurs when another country's currency, such as the United States dollar is adopted as a country's legal tender currency. This is an indication of a strong commitment to fixed exchange rate mechanism than a currency board. The greatest advantage of dollarization is its total avoidance of possibility of a speculative attack on the domestic currency, which could still be possible under a currency board arrangement.

3.6 Why Exchange Rate Targeting?

Exchange rate targeting is embraced as a framework of monetary policy in both industrialized and emerging market economies for a number of reasons. These include its simplicity and clarity that makes for easy understanding by stakeholders and the general public. The nominal anchor has the ability to provide an automatic rule for the conduct of monetary policy which mitigates the time-inconsistency problem. Under the regime, exchange rate target force a loosening of policy when there is tendency for the domestic currency to appreciate or a tightening of policy when there is tendency for the domestic currency to depreciate thus, disallowing discretionary monetary policy to the barest minimum.

An exchange rate target has the capacity to keep inflation under control by anchoring the inflation rate of traded goods to that in the anchor country. Also, the central bank no longer has the ability to print money and thereby cause inflation, while at the same time speculative attack on a country's currency is discouraged.

Notwithstanding the positive side of an exchange rate targeting framework, it is bedevilled with many shortcomings. First, it weakens the accountability of the monetary authorities as it eliminates important signals that can assist in containing

monetary policy from becoming too expansionary. With capital mobility, an exchange rate targeting country loses its discretionary/independent monetary policy to respond to domestic random shocks that are not associated with those of the anchor country. On the other hand, the shocks in the anchor country are directly and automatically transmitted to the targeting country, as changes in foreign interest rate lead to corresponding changes in the domestic interest rate

In addition, there is the loss of capacity of the central bank to perform the lender-of-last resort function in periods of financial crises. In this case, if there is speculative attack on a currency, the resultant exchange of domestic currency for foreign currency leads to a contraction in the money supply with a damaging effect on the domestic economy especially under a currency board system. Another disadvantage of exchange rate targeting is the exposure of a country's currency to speculative attack, thereby requiring substantial holding of foreign reserves by the anchoring country.

3.7 Inflation Targeting

Inflation Targeting (IT) is a framework for monetary policy in which the central bank makes an explicit commitment to conduct monetary policy to meet a publicly announced numerical inflation target within a particular time frame. It can also be described as a framework in which the primary goal of monetary policy is to achieve price stability in form of an inflation target. The importance of inflation targeting is that it clearly specifies the inflation objective and a clear commitment to the achievement of this objective, given that monetary policy works in part by influencing inflation expectations.

Inflation targeting involves several elements. The type of inflation being targeted should be properly defined in terms of core or headline inflation. The measure could be a producer price index, wholesale price index or retail price index. It is important to specify, whether it is point or range targeting. There must be institutional commitment to price stability as the primary goal of monetary policy by the fiscal and monetary authorities under an environment of effective fiscal and monetary policy co-ordination and getting a commitment to achieving that target. Others include an information inclusive approach whereby many financial and economic variables are employed in making decisions on monetary policy. Inflation targeting requires increasing the transparency of the monetary policy process through communication with the market and the public about plans and objectives of monetary policy; and increasing the accountability of the central bank for achieving the inflation target.

3.7.1 Conditions for Inflation Targeting

Inflation targeting requires a number of pre-conditions for its successful implementation as a monetary policy strategy. The first requirement for the adoption of IT in any country is that the central bank should have a considerable degree of independence - instrument and/or goal independence, and must be free from fiscal dominance in which monetary policy is dictated or constrained by fiscal considerations. This implies that public sector borrowing from the central bank should be low or non-existent, while government should have a broad revenue base and should not rely on seigniorage.

The domestic financial market should have enough depth to absorb public and private debt placements, while the accumulation of public debt (foreign and domestic) should be sustainable. There should be the absence of multiple policy objectives, meaning that other objectives, such as high employment, exchange rate stability, etc, must be subordinated to the inflation objective. Equally important are technical considerations such as the availability of data/information and appropriate models for inflation forecasting that provide the monetary authorities with the right signals about the time-path of future inflation in order to successfully hit the target and guarantee sustained macroeconomic stability.

3.7.2 Types of Inflation Targeting

In the literature, three categories of IT have been identified. These include Full Fledged Inflation Targeting (FFIT), Eclectic Inflation Targeting (EIT) and Inflation Targeting Lite (ITL). Full-Fledged Inflation Targeting (FFIT) is practiced by countries that have medium to high level of credibility, and are clearly committed to inflation target. This commitment is institutionalized legally in the form of specification of the goal and/or instrument of the central bank as a means of enhancing the transparency of the monetary policy framework and the accountability of the central bank. Eclectic Inflation Targeting (EIT) countries command sufficient credibility that can enable them to maintain low and stable inflation without full transparency and accountability. Inflation Targeting Lite (ITL) countries announce a broad inflation objective, but owing to low credibility and weak financial market, monetary authorities are not able to maintain inflation as the sole policy objective. Their relatively low credibility reflects vulnerability to economic shocks, financial instability and a weak institutional framework. ITL can be viewed as a transitional regime during which the authorities implement the structural reforms required for the credible adoption of inflation target as a nominal anchor in the medium to long term.

Inflation targeting has been embraced by many central banks because of the transparency arising from its simplicity and clarity of target. This makes market

participants and the general public to understand the thrust of monetary policy. Consequently, it brings down inflation expectation as well as reduces the effect of inflationary shocks. Also, it does not rely on a stable relationship between monetary aggregates and inflation. Above all, it increases the accountability of the central bank.

IT has been criticized on the grounds that it is prone to delayed signalling owing to the long lags in the effect of monetary policy decision, making inflation outcomes to be revealed only after a substantial lag. Another concern of an IT monetary policy framework is low growth in output and employment associated with inflation reduction at the outset of an IT strategy. Also, the framework focuses too much on inflation which may lead to too tight a monetary policy when inflation is above target and thus promoting larger output fluctuations. For this reason, inflation targeting countries set their inflation targets above zero reflecting the concern of monetary policy makers that too low inflation or deflation can have negative effects on real economic activity.

3.8 Quantitative Easing (Balance Sheet Approach)

Quantitative easing refers to an increase in the size of the balance sheet of the central bank through an increase in its monetary liability (base money), holding constant its asset composition. It is also a shift in the composition of the assets of the central bank towards less liquid and riskier assets, holding constant the size of the balance sheet. The less liquid and more risky assets can be private securities which may be toxic as well as sovereign or sovereign guaranteed instruments that include all forms of risks such as liquidity and credit risks.

Quantitative easing is another nominal anchor usually employed in periods of large scale deflation or financial crisis to put money into the economy through the deposit money banks (DMBs). The purpose is to encourage investment when the traditional operating instrument such as interest rate has failed. It is aimed at easing liquidity shortage in a manner that reduces pressure on the banks. Under this framework, a central bank's principal operating instrument becomes the level of current account balances held by financial institutions at the central bank. In practice, the central bank provides ample liquidity and the policy/call rate is determined by the market.

Quantitative easing is essentially, an unconditional monetary policy in which a central bank create money and inject such money into the banking system, i.e. the deliberate expansion of money supply in an economy. A central bank does this by using new money to purchase treasury securities (bonds, treasury bills and certificates, etc.) in the open market, or by buying private sector assets from banks in exchange for money, or by lending new money to DMBs or a

combination of these actions. The new money thus created is deposited in the accounts of the DMBs which in turn create new money through the fractional reserve banking system in a process known as deposit multiplication. This policy action results in reducing interest yields on gilt-edge instruments and reducing interbank interest rate and thus encourages banks to grant credit to the real sector of the economy.

3.9 Rules versus Discretion Debate

The conduct of monetary policy has been a subject of debate in the literature. The debate of rules versus discretion in monetary policy has its origin in the writings of Henry Simons (1936). The thrust of the debate is whether monetary policy should be based on a rule or discretion. The choice of either of these or a mixture of both depends on the overall policy objective of the monetary authorities.

A rule-based monetary policy is anchored on some defined relationship between certain identified variables. For example, it can be specific as fixing the quantity of currency and demand deposits, or general as when the monetary authorities announce the course of action it will take for various states of the economy. Although rules can be set in a model form (such as the Taylor Rule), they require variables such as the natural level of output and expected prices that are only approximate. A rule can be active, as when it requires increasing the level of money supply when the economy is in recession or passive when the level of money supply is increased by a fixed per cent annually. By definition, rules are normative, but some rules are descriptive, meaning that they predict values close to what the authorities actually allow.

Monetary policy by discretion requires delegating responsibilities to economic institutions such as the central bank to decide on macroeconomic goals and policies as they deem fit or appropriate. A decision maker such as the monetary authority analyzes the problem at hand, and decides on the best policy action to take. Discretionary monetary policy may be inconsistent when it does not change the initial conditions that create a disturbance, or short-sighted when a policy requires lags to be effective.

CHAPTER 4

MONETARY POLICY IMPLEMENTATION IN NIGERIA

4.1 Introduction

The implementation of monetary policy in Nigeria has been under two broad regimes, in consonance with the Federal Government's macroeconomic policy objectives. The two regimes are direct and indirect control. The monetary policy measures under these two regimes are discussed below:

4.2 Direct Controls

The direct method of monetary policy lasted from 1959-1985. Between 1960 and 1962, the CBN operated a passive monetary policy regime in which the focus was on developing and maintaining a sound domestic currency. In 1962/63, the focus changed to development issues with the need to ensure adequate supply of credit to the economy with minimal inflationary pressures. In the latter part of 1964 and in 1965, the primary objective of monetary policy was on the achievement of balance of payments equilibrium and the policy tool was credit rationing conveyed in guidelines that placed ceilings on the rate of expansion of commercial bank advances.

Credit restriction was lifted in November 1966 to enable the banking system provide the Nigerian government with sufficient resources to prosecute the civil war. The result was high post-war inflationary pressures, deteriorating balance of payments position, and a rapid increase in deficit financing. Subsequent policies were directed at reducing inflationary pressures, restoring normal economic conditions, relieving the pressures on the external payments position, increasing Government revenue and reducing government's reliance on the banking system. This policy stance continued throughout the period 1966 to March 1972.

In the period April 1972 and March 1976, the thrust of monetary policy was to expand domestic aggregate output and curtail inflationary pressures. During the same period, government finances and foreign exchange reserves improved owing to increased oil earnings. This resulted in increased aggregate demand and money supply. The task of monetary management became complicated with excess liquidity. Consequently, the selective credit control policy was retained, supported by interest rate and exchange rate policies in the latter part of the period. Stabilization securities were also introduced in an attempt to reduce the high liquidity conditions in the banking system.

The CBN continued with its monetary restraint policy between April 1976 and December 1981 due to the persistence of excess liquidity in the system. Direct credit ceiling, cash reserve requirements, stabilization securities, the exclusion of deposits against letters of credit from eligible liquid assets and interest rate changes were combined to address the challenge of excess liquidity. Between 1981 and 1985, the monetary policy instruments were broadly the same as in the decade preceding it (1970-1980). However, the instruments were fine-tuned in line with the challenges faced. Some major highlights during this period included:

- Prescription of permissible aggregate credit expansion ceilings;
- Guidelines on the sectoral allocation of banks' loans and advances which continued to favour the preferred sectors of the economy (agriculture and manufacturing);
- Selective credit controls to encourage indigenous businesses, small-scale enterprises and the rural areas;
- Unchanged Cash Reserve Requirement (CRR) during the period; and
- Marginal upward adjustments of interest rates.

The policy of stringent monetary restraint targeted the conservation of foreign exchange reserves and the maintenance of price stability. Measures taken to reduce foreign exchange disbursements included the re-introduction of pre-shipment inspection and the imposition of pre-import deposits ranging from 10.0 per cent to 250.0 per cent. In addition, interest rates were raised to encourage savings and reduce demand for foreign exchange.

4.3 Indirect Controls

As conditions in the economy worsened in 1986, concerted efforts were made to eliminate unnecessary economic controls and to free the economy (Ojo, 2000). This prompted the introduction of the Structural Adjustment Programme (SAP) in July 1986. The purpose was to ultimately institute a more efficient market system for the allocation of resources, with the implication that excessive controls of the previous two decades would be gradually eliminated or reduced to levels that would not inhibit economic development.

The three major planks for achieving this overall goal included exchange control liberalisation, adoption of relevant pricing policies in all sectors of the economy and a further rationalization and restructuring of public expenditure and customs tariffs. Thus, monetary policy was expected to play an important role in the new

economic management process. Indeed, the ultimate objectives of monetary policy remained as in pre-1986 period. However, in the specific environment of financial and economic liberalization, monetary policy was also to stabilize the economy in the short-run and to induce the emergence of a market-oriented financial sector.

At the start of SAP, traditional instruments were fine-tuned to deal with the excess liquidity in the economy. In August 1986, the CBN, for instance, required banks to deposit in a non-interest bearing deposit account at the Bank, the naira equivalent of all outstanding external payment arrears. Also, the 10 per cent ceiling imposed on the rate of credit expansion by banks fixed in January 1986 was reduced to 8 per cent in July and maintained until August 1987 when it was further reduced to 7.4 per cent.

Several measures were also added to stem the growth of excess liquidity. There was the abolition of the use of foreign guarantees/currency deposits as collateral for naira loans which implied that deposit money banks were no longer to grant domestic loans denominated in naira on the security of foreign guarantees or deposits held abroad and in domiciliary accounts with the banks. In May 1989, the Federal Government directed that all public sector accounts be withdrawn from the banks. Its immediate impact was the reduction in banking system liquidity. A reverse policy took place in 1999 when the retail functions of the CBN were transferred to the DMBs. Other policy measures included:

- Rationalization of sectoral credit controls so as to give a larger measure of discretion to banks in respect of credit operations in 1986 and 1987;
- Abolition of all mandatory credit allocation mechanisms by the CBN from October 1996;
- Adjustment of CRR to embrace the total deposit liabilities (demand, savings and time deposits) of banks instead of the earlier method of computing the CRR based on demand deposits alone;
- Deregulation of interest rates;
- Reintroduction of the use of stabilization securities in 1990;
- Enhancement of commercial bank's minimum paid-up capital from N20 million to N50 million in 1992, N500 million in 1999 and N1.0 billion from January 2001; and

- Shift to the use of OMO in 1993 with intention to migrate from direct controls of monetary management to an indirect or market-based approach.

In line with the liberalization policy thrust of SAP, there was a paradigm shift from the hitherto direct monetary control method to an indirect approach anchored on the use of market instruments in monetary management. This was borne out of the desire to eliminate the distortions and inefficiencies in the financial system caused by the prolonged use of administrative controls and the need to engender competition amongst banks and other operators in the financial system. Two major policy regimes of short- and medium-term horizon can be identified:

4.3.1 The Short – Term Monetary Policy Horizon (1986-2001)

Following the liberalization of the economy in 1986, monetary policy was refocused to a one year perspective. Consistent with the broad objective of monetary policy for the year, a number of monetary targets and instruments were adopted during the one-year horizon. OMO, conducted wholly using the Nigerian Treasury Bills (NTBs), continued to be the primary technique of monetary policy. This was complemented by the cash reserve requirement (CRR) and the liquidity ratio (LR).

Other policy instruments employed included the discount window operations, mandatory sale of special NTBs to banks and a requirement of 200 per cent treasury instruments to cover for banks' foreign exchange demand at the Autonomous Foreign Exchange Market (AFEM). Interest rate policy was deregulated through the proactive adjustment of the minimum rediscount rate (MRR) to signal policy direction consistent with liquidity conditions. Surveillance activities of the CBN focused mainly on ensuring sound management and maintenance of a healthy balance sheet position on the part of the banks. On the external side, the official and interbank exchange rates were unified in 1999.

4.3.2 The Medium-Term Monetary Policy Horizon (2002-Date)

In 2002, the CBN commenced a two-year medium-term monetary programme aimed at freeing monetary policy from the problem of time inconsistency and minimizing over-reaction due to temporary shocks. The new monetary policy horizon, still in operation, is based on the evidence that monetary policy actions affect the ultimate objectives with a substantial lag. Under the medium-term, monetary policy guidelines are open to half-yearly review in line with developments in monetary and financial market conditions in order to achieve medium- to long-term goals.

The main objectives of monetary policy have remained largely the same, namely to subdue inflation to a single digit level and maintain a stable exchange rate of the naira, as well as the objectives of output and employment generation. Attention has also been focused on the need for a more competitive financial sector geared towards improving the payments system. The OMO has continued to be the primary tool of monetary policy, and is complemented by reserve requirements, discount window operations, foreign exchange market intervention and movement of public sector deposits in and out of the DMBs. The CBN has continued to ensure banking soundness and financial sector stability to enhance the efficiency of the payments system.

4.4 The Monetary Policy Implementation Framework (2006-Date)

Following recent developments in the economy, particularly in the financial sector, it became necessary to review the conduct of monetary policy and strengthen the machinery of monetary policy to achieve set targets and objectives. In particular, the relationship between the Minimum Rediscount Rate (MRR) and other rates in the market became weak and the significance of using the MRR as the anchor for other short-term interest rates was eroded. Also, the persistent failure to meet stipulated monetary policy targets continued unabated.

Consequently, in December 2006, the Bank introduced the current framework for monetary policy implementation with the objective of addressing the persistent interest rate volatility and making the money market more responsive to monetary policy interest rate changes, especially the overnight interbank interest rate. The containment of interest rate volatility was to be addressed through the application of some policy measures including 'averaging of reserve requirements over a maintenance period of two weeks and the use of Standing Lending and Deposit Facilities to define an interest rate corridor around the monetary policy rate (MPR) which would drive interest rates in the money market.

4.4.1 Repurchase Agreements

Repurchase Agreements (Repos) are temporary purchases (repos) and sales (reverse repos) of eligible securities by the Bank to either supply or withdraw liquidity and ensure a healthy interbank market and curtail interest rate volatilities. Repo transactions enable the Bank to provide temporary liquidity to needy operators in the discount window on a collateralized basis to ensure the smooth operation of the interbank market on a continuous basis. The transactions (repos and reverse repos) are usually of between 1-7 days, executed between the Bank and any of the operators (banks and discount houses) in the discount window.

Under a repo agreement, the CBN injects domestic currency against the purchase of a domestic asset through a contract specifying the resale at a given price at a future date (the repurchase rate).

Although most of the transactions are outright sales or purchases, repo agreements have also been used for liquidity management (but remain ineffective since a short-term withdrawal of liquidity does not address the underlying problem of systemic excess liquidity). From 18th September, 2008 the tenor of repos was extended to 365 days, following concerns on the impact of the global financial crisis sparked-off by the sub-prime mortgage crisis in the United States. Repos assist an operator to overcome its immediate liquidity shortages, in the process, moderating interbank rates. The CBN's policy rate is applied to all these transactions.

4.4.2 Reverse Repos

This activity is the opposite of the repurchase agreement resulting in the injection of liquidity into the system. It provides operators in the money market, with excess reserves to invest through the discount window at an agreed interest rate. Thus, it helps to influence interbank interest rates from falling to unduly low levels in periods of liquidity surfeit in the banking system. In a reverse repurchase agreement, the CBN sells funds as assets against domestic currency, temporarily withdrawing liquidity, but enters into an agreement to buy back the asset at a future date.

4.4.3 The CBN Standing Facilities

The CBN Standing Facilities comprise the Standing Lending and Standing Deposit Facilities. The standing facilities were introduced on 11th December, 2006 as an improvement to the monetary policy implementation machinery. Its aim was to effectively reduce interest rate volatility in the interbank market and ensure a fairly stable financial market environment that aids investment decisions and engenders increased public confidence in the financial system.

(i) Standing Lending Facility

The Standing Lending Facility provides access to liquidity for participants in the Real Time Gross Settlement System (RTGS), on an overnight basis, to assist them square-up their short positions in the interbank market and ensure the smooth operation of the market.

(ii) Standing Deposit Facility

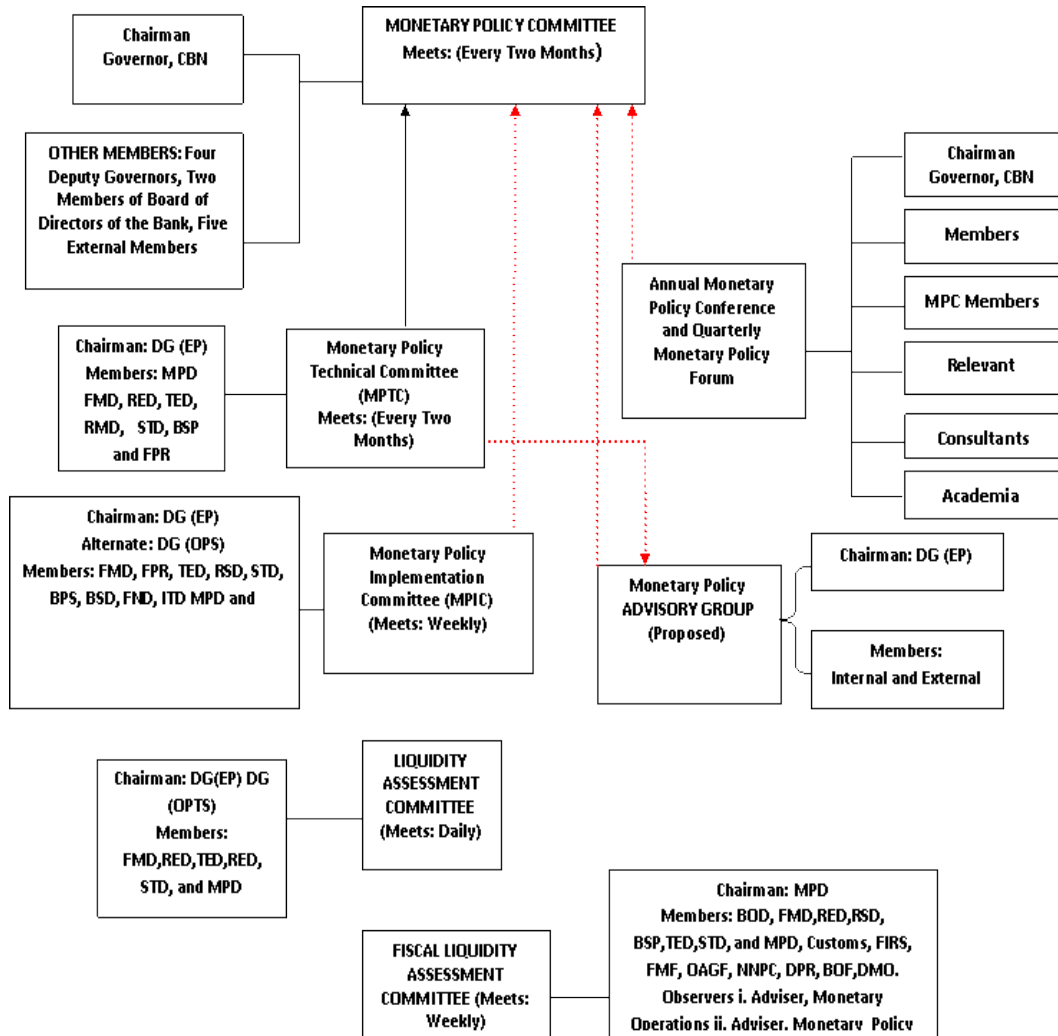
The Standing Deposit Facility on the other hand, provides an investment outlet for the surplus reserves of operators in the RTGS, thereby increasing the incentive for resource mobilization. The CBN Standing Facilities

(Lending and Deposit Facilities) which constitute the hub of the new monetary policy implementation framework were designed to achieve interbank rate stability by influencing the short-term money market rates. They, therefore, provide the financial valves for absorbing surplus funds and injecting overnight funds on a lender of last-resort basis.

Over the years, the efficacy of monetary policy in Nigeria improved progressively. It started from a position where the economy was largely rudimentary, moved through periods of economic crises and the use of unorthodox policy instruments. Over the last decade, the monetary policy tools have been substantially sharpened in accordance with international best practices, resulting in more effective monetary policy.

Many factors could be identified as the sources of strength of the monetary policy process. A key element was the rapid development of in-house expertise which successfully steered the processes to an internationally accepted standard. Another factor was the promotion of institutional changes reflected in the improved efficiency of the financial markets. Monetary policy also gradually became more transparent and gained the confidence of the general public. No less important was the improved coordination between monetary and fiscal policies. Nevertheless, monetary policy faces enormous challenges in the years ahead. Current monetary policy operations need to be further fine-tuned to sustain the relevance of the policy in the economy.

Figure 4.1: Current Institutional Framework for Monetary Policy Implementation in Nigeria



CHAPTER 5

THE MONETARY POLICY TRANSMISSION MECHANISM

5.1 What is the Transmission Mechanism of Monetary Policy?

The monetary policy process postulates that changes in money supply or other aggregates will work through some intermediate variables through which some effects are transmitted to the ultimate goals of monetary policy—prices, output/employment, and external balance. Thus, monetary policy is formulated with some assumptions of the path through which monetary policy impacts on the economy. This is referred to as the transmission mechanism of monetary policy. It defines the various channels through which policy-induced changes in the nominal money stock or the short-term nominal interest rate affects prices and output in the economy.

5.2 Aggregate Money Supply

Borrowing money within an economy leaves the stock of money within that economy the same. If we assume that the current supply of money in the economy is fixed, then we can conceive of a situation in which the current supply of money does not match the demand for money in the economy. This issue leads us to the determinants of the aggregate money supply within the economy i.e. is it fixed or controllable by the central bank; or could the total money supply within the economy be increased by the actions of economic agents as they make their spending and borrowing decisions?

Assume for the moment that the aggregate money supply is fixed or growing at a fixed level of growth. An increase in the demand for goods and services and the accompanying increase in the demand for money, to allow the exchanges to take place, may create a temporary shortage of money in the aggregate. This does not imply a shortage of notes and coins in circulation.

The shortage is in the form in which bank deposits are not growing sufficiently to match the increase in aggregate demand. Since bank deposits grow only when banks make new loans, when banks are unwilling or unable to meet the new borrowing requirements of their customers at existing interest rates, a shortage of money supply will occur. This scenario creates two broad possibilities.

In the first place, the price of borrowing from the banks (interest rates) might rise. This would overcome the shortage if the rising interest rates make people to borrow less and to spend less. This introduces an additional condition on aggregate expenditure - the ability to borrow or the willingness to borrow, which is affected by the cost of borrowing. In the second place, the monetary

authorities may restrict borrowing (credit) in other ways such as imposing minimum repayment amounts. This scenario creates the impression that the central bank is in complete control of money supply (i.e. money supply is exogenous) and that it can keep the supply of money unchanged in the face of increased demand to cause interest rates to rise.

In the alternative, we see the central bank as having little or no direct control over money supply in which case money supply is endogenous but has control over interest rates. In this way, the monetary authorities may have been responding to inflationary pressures caused by the initial increase in the demand for goods and services by raising the interest rate. If this leads to low borrowing and expenditure, the supply of money or its rate of growth will fall. The implication of the latter situation is that the role of the monetary authorities on the stock of money is indirect, taking place through the rate of interest and from there through the demand for credit.

The second possibility is that as demand for goods and services and the desire to borrow increases, banks might respond by not granting additional loans but by tightening the conditions on which they are willing to lend. This would reduce the number of people previously able to borrow and others would be able to borrow less than previously. Thus, people's ability to borrow and spend would be restricted as people are credit constrained. This implies that money supply will not grow and this would occur without an increase in interest rates. Banks may also tighten lending because of pressures from the monetary authorities to do so. Thus, the central bank may attempt to directly control the quantity of money supply and/or types of loans made by banks.

5.3 The Monetary Base

The monetary authorities have control over the size of the monetary base (high-powered money). A stable relationship is assumed to exist between the monetary base and the quantity of deposits banks can create. If the monetary authorities increase the size of the monetary base, the banks would be unable to increase the size of loans to their customers if there were increased demand for bank loans. As they try to increase loan size, they would fall short of the requirements for the monetary base.

Assuming the monetary authorities were unable to control the monetary base or the relationship between the monetary base and bank deposits, banks would freely go ahead to meet the increased demand for credit as aggregate consumption increases. This would lead to an increase in the stock of money and bank balances. This scenario is rather simplistic. A major concern is how the

supply of money is increased and how the monetary authorities react to that increase to stabilize the general price levels.

For most developing countries, knowledge about the relative strengths of the transmission channels of monetary policy is still at its rudimentary level. Therefore, little is known about how monetary policy actions impact on the real economy. Besides, structural rigidities constrain the efficient transmission of monetary policy impulses to the real economy, creating the impression that monetary policy is largely inactive. The transmission mechanism of monetary policy is not fixed or static as changes are bound to occur over time. Some channels that used to be very strong either get degraded in importance or become outright irrelevant.

Table 5.1 The Monetary Policy Transmission Mechanism				
<i>Source of Change</i>	<i>Money Supply</i>	<i>Response of the Authorities</i>	<i>Changes in Interest Rates</i>	<i>Outcome</i>
A. Increased Aggregate Demand				
1. Money Supply Increases	Endogenous	-	-	Aggregate Demand Rises
2. Money Supply unchanged	Exogenous	Restrict Money Supply	Increases	Aggregate Demand Unchanged
3. Money Supply Unchanged	Endogenous	Restrict Credit Directly	Unchanged	Aggregate Demand Unchanged
B. Aggregate Demand Unchanged but authorities seek to Reduce it				
1. Money Supply reduced	Exogenous	Reduce Money Supply Directly	Increases	Aggregate Demand falls
4. Money Supply reduced	Endogenous	Increase Interest Rates Directly	Increases	Aggregate Demand Falls
5. Money Supply reduced	Endogenous	Restrict Credit Directly	Unchanged	Aggregate Demand Falls

The risk, therefore, is the possibility that the assumed channel of transmission could be wrong or irrelevant or that the assumed magnitude of impact could be wrong by some significant margin. For instance, what constitutes money has expanded by the introduction and proliferation of technology-backed financial products which have tended to alter the empirical relationship between economic activity, inflation and money supply.

The transmission mechanism of monetary policy is generally complex and could be approached from various dimensions. The angles of approach are not mutually exclusive and may operate to reinforce each other. Some of the channels of monetary policy transmission are discussed below:

5.4 Interest Rate Channel

According to the traditional Keynesian interest rate channel, a policy-induced increase in the short-term nominal interest rate leads first to an increase in long-term nominal interest rates, as investors act to arbitrage away differences in risk-adjusted expected returns on debt instruments of various maturities. When nominal prices are slow to adjust, movements in nominal interest rates translate into movements in real interest rates, firms, finding that their real cost of borrowing over all horizons has increased, cut back on their investment expenditures; likewise households, facing higher real borrowing costs, scale back on their purchases of homes, automobiles, and other durable goods. Thus, aggregate output and employment falls.

5.5 Exchange Rate Channel

In an open economy like Nigeria, monetary policy has a transmission channel to output and prices through the exchange rate. This transmission mechanism is accommodated within the portfolio and expectations channel theory. Under a floating exchange rate regime, wealth portfolios include both domestic and foreign assets. When the supply of money increases, a portfolio adjustment takes place, resulting in a higher demand for foreign assets, which will depreciate the exchange rate of the domestic currency and hence the value of the domestic assets. Again, additional real effects of a policy-induced increase in the short-term interest rate come about when the domestic nominal interest rate rises above its foreign counterparts, equilibrium in the foreign exchange market requires that the domestic currency gradually depreciates at a rate that, again, serves to equate the risk-adjusted returns on various debt instruments, in this case, of markets for financial assets and durable goods.

5.6 Asset Price Channel

This is also known as the portfolio balance channel. Money is seen as one of the assets that can feature in the portfolios of wealth holders. Other assets are financial and real assets. Each asset is regarded as yielding a stream of incomes and services. A portfolio will be in balance when the marginal yields are the same on all assets. Adjustments to a portfolio results in increased expenditures by investors; and through that, to output and prices. The outcome depends, however, on the underlying assumptions. In the Keynesian framework where the demand for money and demand for real assets are perfectly inelastic with regard to the yield on assets, an increase in money supply will result in an increase in bond prices and a fall in interest rates. This reduces the opportunity cost of investing in real capital assets, thereby raising the size of the optimum capital stock and leading to higher demand for capital assets or an increased flow of investment expenditure. In a monetarist framework in which money is a substitute

for all assets in a portfolio, the cross-elasticity of demand for money with regard to the yield on any asset is likely to be low. Thus, asset holders whose portfolios are in balance because of increased money balances will shift into any of equities, real physical assets and financial assets which will then influence real economic activity.

5.7 Credit Channel

Credit channel operates through the bank lending and the balance sheet channels.

5.7.1 Bank Lending Channel

For many banks, particularly small banks, deposits represent the principal source of funds for investment. Hence, an open market operation that leads first to a contraction in the supply of bank reserves and then to a contraction in bank deposits requires banks that are especially dependent on bank loans to cut back on their investment spending.

5.7.2 Balance Sheet Channel

This is a much broader credit channel. In the presence of financial markets' imperfections, a firm's cost of credit, whether from banks or any other external source, rises when the strength of its balance sheet deteriorates. A direct effect of monetary policy on the firm's balance sheet comes about when an increase in interest rates increases the payments that the firm must make to service its floating rate. An indirect effect arises, too, when the same increase in interest rates reduces the capitalized value of the firm's long-lived assets. Hence, a policy-induced increase in the short-term interest rate not only depresses spending through the traditional interest rate channel, but also raises each firm's cost of capital through the balance sheet channel, deepening and extending the initial decline in output and employment (with a lag).

The process of the balance sheet channel shows how monetary policy affects the credit portfolio of financial intermediaries as well as economic units. For example, a contractionary monetary policy such as sale of treasury instruments would affect banks' ability to grant loans and thus, lead to credit rationing. This has implication for credit availability to borrowers, especially small-scale borrowers with less sophistication and collateral to back-up their loan demand. Also, the credit crunch usually shore-up interest rates thereby raising the cost of credit to small-scale/marginal economic agents. This relationship is illustrated below.

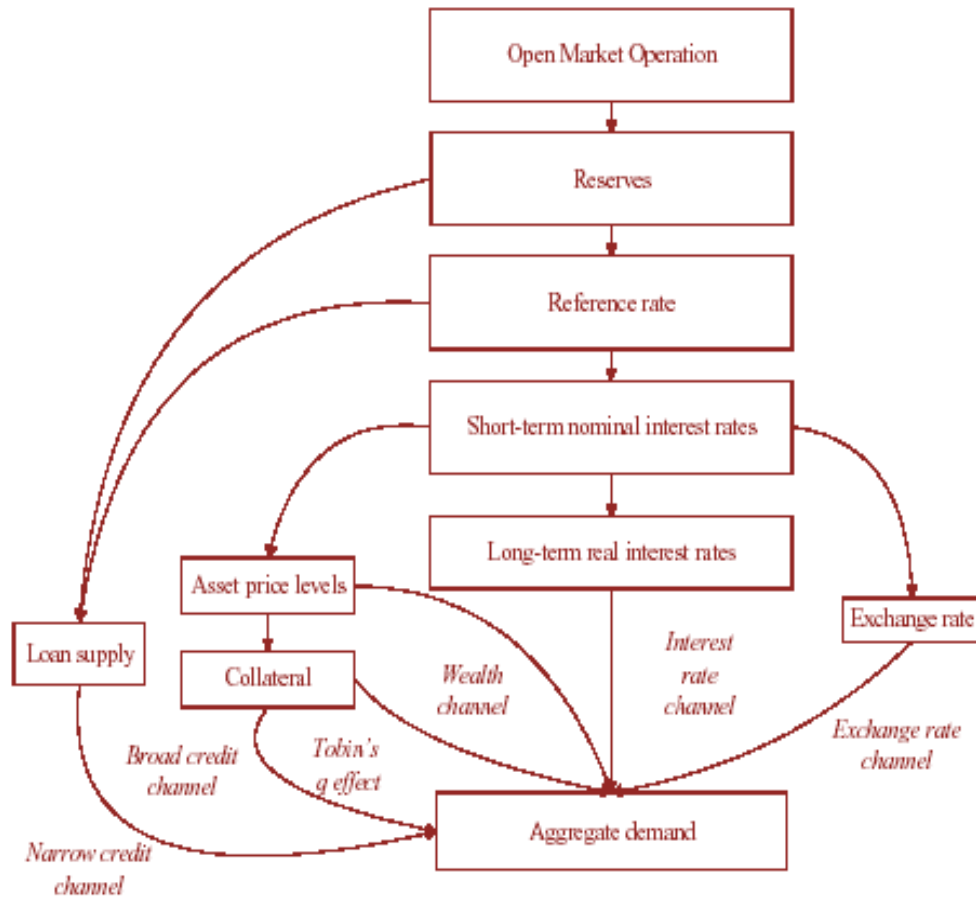


Fig 5.1: Balance Sheet Channel of Monetary Policy Transmission Mechanism.

CHAPTER 6

INSTITUTIONAL FRAMEWORK FOR MONETARY POLICY

6.1 The Mandate of the CBN (CBN Act 2007)

The central bank of Nigeria Act 2007 vests the responsibility for formulating and implementing monetary policy in Nigeria on the CBN. Hitherto, the function was carried out by the CBN under the supervision of the Ministry of Finance in consultation with the President of the Federal Republic of Nigeria.

Under the 2007 CBN Act, the Bank performs its monetary policy functions through the Monetary Policy Committee (MPC) (a creation of the Act). The MPC was established by the CBN in 1999 to anchor the task of monetary policy formulation. However, legal recognition was accorded the Committee with the passage of the CBN Act of 2007. Consequently, Section 12 of the CBN Act of 2007 noted that, there shall be within the CBN the Monetary Policy Committee (MPC), which will have the main responsibility of formulating monetary and credit policy.

Specifically, the Act provides that the MPC will help to

- (i) facilitate the attainment of price stability; and
- (ii) support the economic policy of the Federal Government.

The memberships of the MPC is drawn from both within and outside the Bank, so as to enhance the quality of monetary policy, introduce transparency and credibility, as well as facilitate monetary policy transmission. The Act provides that the MPC shall consist of twelve members, namely:

- The Governor of the Bank who shall be the Chairman;
- The four Deputy Governors of the Bank;
- Two members of the Board of Directors of the Bank;
- Three members appointed by the President; and
- Two members appointed by the Governor.

Apart from the MPC, other administrative Committees exist within the Bank to facilitate the task of monetary policy. Consequently, Committee were established as follows; the Monetary Policy Technical Committee (MPTC)-2005, Monetary Policy Implementation Committee (MPIC)-2004, the Liquidity Assessment Group (LAG)-2006 and the Fiscal Liquidity Assessment Committee (FLAC)-2005.

6.2 The Monetary Policy Committee (MPC)

The Monetary Policy Department, MPD, acts as Secretariat to the MPC and coordinates all the meetings of the Committee. The MPC is statutorily required to meet at least six times in a year and publishes its calendar of meetings on the CBN website. The Governor or in his absence, the Deputy Governor in charge of Monetary Policy may summon a meeting of the MPC giving not less than 7 days' notice. For the MPC to meet, six members, two of whom shall be the Governor and a Deputy Governor or two Deputy Governors shall constitute a quorum. Decisions are taken by the vote of all those present at the meeting and in the event of a tie, the Chairman shall have a second or casting vote. The MPC submits periodic reports of its meetings and activities to the Board of Directors of the Bank. The decisions of the MPC are communicated to the public through the issuance of a Monetary Policy Communiqué at the end of each meeting. This is consistent with the global principles of the Code of Good Practices on Transparency on Monetary and Financial Policies of the IMF.

6.3 The Monetary Policy Technical Committee (MPTC)

The Monetary Policy Technical Committee (MPTC) is the technical arm of the MPC. The MPTC was established in 2005 and is headed by the Deputy Governor (Economic Policy). The committee prepares economic analysis for the Monetary Policy Committee. It receives inputs from the member departments - Research, Statistics, Banking and Payments System, Banking Supervision, Financial Policy and Regulation, Reserve Management, Financial Markets, Trade and Exchange as well as Monetary Policy. The economic report reviews monetary, financial, output, and price developments in the economy as well as developments in the international economy that have impact on the Nigerian economy. The Committee reviews the economic report for the technical soundness of the monetary policy recommendations for the MPC. The MPTC meets as often as it is necessary to get a harmonized and consistent report for the MPC members.

6.4 The Monetary Policy Implementation Committee (MPIC)

The Monetary Policy Implementation Committee (MPIC) meets weekly to take decisions on how much liquidity to mop-up or inject into the system and with what instruments. The MPIC is chaired by the Deputy Governor, Economic Policy, with the Directors of Monetary Policy, Research, Statistics, Trade and Exchange, Banking and Payments System, Reserve Management, Currency Operations, Finance, Financial Policy and Regulation, Financial Markets, Banking Supervision, ITD, SPD, and Branch Operations as members.

6.5 The Liquidity Assessment Group (LAG)

The Liquidity Assessment Group meets daily to assess the actual liquidity that would determine the policy action to undertake. Such actual liquidity is seen from the perspective of the Banking and Payments System and The Trade and Exchange Departments for purposes of mop-up either by the sale of Treasury Bills or foreign exchange. It also serves to validate as well as improve the accuracy of the forecasts of liquidity was formerly conducted by the Monetary Policy Department, but was transferred to the Financial Markets Department in 2010. The theoretical basis of the liquidity assessment is supplied by the Research and Monetary Policy Departments. The membership of the LAG is drawn from Banking and Payments System, Reserve Management, Financial Markets, Trade and Exchange, Research and Monetary Policy Departments.

6.6 The Fiscal Liquidity Assessment Committee (FLAC)

The Fiscal Liquidity Assessment Committee (FLAC) is an inter-agency committee established to pool fiscal and monetary data for monetary management. The broad objectives of the Committee are to enhance the effective interaction of monetary with fiscal policies to facilitate obtaining credible and high frequency data on fiscal operations of the Federal Government that impact on liquidity and price stability. The FLAC has succeeded in eliciting the cooperation of the various fiscal agencies since its inception. The Committee meets on weekly basis to collect data on the fiscal operations of the Federal Government and other relevant information for liquidity management. The output of the FLAC also serves as input to the Monetary Policy Implementation Committee (MPIC) and monetary policy technical committee (MPTC). FLAC was established in 2005.

CHAPTER 7

MONETARY AND FISCAL POLICY COORDINATION

7.1 Introduction

Macroeconomic policies are designed to achieve the objectives of price stability, balance of payment equilibrium, employment and economic growth. There are two key policies generally used to achieve macroeconomic objectives: namely, monetary and fiscal policies. Monetary policy is used by central banks to control the availability and cost of credit in the economy. This is achieved through changes in money supply, interest rates and other policy variables that affect the flow of credit in the economy. Fiscal policy on the other hand, is conducted by Federal Ministry of Finance (FMF) or the Treasury, through the use of key policy instruments like government revenue particularly taxes, government expenditure and transfer payments to influence the aggregate level of economic activity. There are three main functions of fiscal policy; income distribution, allocation and stabilization. Fiscal policy is used to influence aggregate demand and incentives to either encourage or discourage certain forms of economic activity.

The objectives of fiscal and monetary policy are often in conflict with each other. There is therefore, often, the need for a trade-off between the policies entailing continuous delicate balancing acts. Policy coordination therefore, requires that monetary and fiscal policies achieve congruence both in design and timing of implementation. It is ordinarily expected that, there should be convergence between monetary and fiscal policies

7.2 Rationale for Policy Coordination

The rationale for the coordination of monetary and fiscal policy is derived from the following interrelated objectives:

- To set internally consistent and mutually agreed targets with a view to achieving non-inflationary growth.
- To facilitate the effective implementation of policy decisions so as to achieve set targets of monetary and fiscal policies through mutually supportive information sharing and purposeful discussions.
- To compel both the CBN and the Federal Ministry of Finance to adopt mutually consistent, supportive and sustainable policies.

In the absence of efficient policy coordination, financial instability could ensue, evidenced by high interest rates, exchange rate pressures, high inflation level and negative impact on economic growth. Thus, weak policy coordination in one area burdens the impact of other policies on the economy. For example, lax fiscal policy will put pressure on the monetary authorities to tighten monetary policy even if the latter cannot fully compensate for the fiscal imbalance. Moreover, the lack of credibility of overall policy framework caused by the long run inconsistency of such policy mix will diminish the effectiveness of the two policies. The effective implementation of macroeconomic policies, thus, requires an extensive coordination between the two authorities –the Central Bank of Nigeria and Federal Ministry of Finance.

The need for policy coordination also arises in the case of structural reforms and liberalization of the financial sector. Such financial sector reforms can only proceed within the framework of supportive fiscal policies that provides macroeconomic stability, fiscal discipline, and an efficient tax system. Supportive fiscal policies with improved legal, accounting and regulatory systems are the prerequisites for successful financial liberalization [World Bank (1989)].

7.3 Institutional and Operational Arrangements for Monetary and Fiscal Policy Coordination

The coordination of fiscal and monetary policies must be supported by concrete institutional and operational arrangements, which take the form of:

- (i) Prescribing limits to central bank credit to the government. These reduce conflicts between the central bank and the Finance Ministry in decisions regarding the sources of deficit financing and enhance the operational autonomy of the central bank.
- (ii) A debt and monetary management committee, that plays an important role in coordinating the volume of debt issuance in the primary market with monetary policy goals and helps to resolve conflicts concerning the stance of policy.
- (iii) Operational arrangements to share information and forecast variations in government balances with the central bank or in expected changes in the government's overdrafts. Such arrangements could help to facilitate appropriate day-to-day adjustment of instruments as well as the attainment of the twin objectives of reserve money and debt issuance.

- (iv) Arrangements and rules for the treatment of central bank operational surpluses may be institutionalized; as such arrangements are important for maintaining central bank operational autonomy.

7.4 Monetary and Fiscal Policy Coordination in Nigeria

In Nigeria, monetary and fiscal policy coordination has moved from an era of tacit coordination through the central bank's subordination to the fiscal authorities from 1960 to 2001, to the era of financial sector reforms (2004) and legislative and Agency support. The membership of the supporting agencies includes the Permanent Secretary, Federal Ministry of Finance, the CBN Board of Directors and Monetary Policy Committee (MPC), who meets regularly to further enhance coordination of monetary and fiscal policies in Nigeria. These developments have ushered in an era of closer cooperation and coordination by all stakeholders. The CBN has leveraged on these most recent developments to put in place institutional frameworks for the effective coordination of monetary and fiscal policies. Consequently a number of inter-agency committees have been established at the instance of the Central Bank towards achieving this objective. Some of these committees are discussed below.

7.4.1 Fiscal Liquidity Assessment Committee (FLAC)

The Fiscal Liquidity Assessment Committee (FLAC) is an inter-agency committee. The broad objectives of the Committee are to enhance the effective interaction of the monetary and fiscal authorities with a view to facilitating data exchange on fiscal operations of the Federal Government that impact on liquidity and price stability.

7.4.2 Monetary and Fiscal Policy Coordinating Committee

The Monetary and Fiscal Policy Committee is anchored by the Debt Management Office. Its membership is drawn from key fiscal agencies and the Central Bank of Nigeria. Until recently, its meetings were ad-hoc in nature but have now been institutionalized on quarterly basis.

7.5 Challenges to Monetary Policy Coordination in Nigeria

The conduct of monetary policy in Nigeria is fraught with major challenges, including the unreliability of the Medium Term Expenditure Framework of the Federal Government. The volatility of crude oil prices in the international market and the unpredictability of the volume of output (which are exogenous to the fiscal authorities) constitute major challenges to cash flow projections. Consequently, the reliability on price and output volume assumptions in the budget as indicators of the future direction of fiscal policy becomes doubtful, thus diminishing the relevance and essence of policy coordination. Given that government expenditure is heavily dependent on price and volume of crude oil

exports, unstable revenues arising from the global oil and commodity price shocks may expand budget deficits and or impair the goal of monetary policy, particularly, when government is compelled to resort to central bank financing through ways and means advances (or simply printing new currency notes).

Another challenge is the growing recognition of the need to keep monetary and liquidity management operations, separate from debt management practices. Moreover, central banks increasingly rely on their own papers (i.e. CBN certificates) as they offer a very flexible instrument for short-term liquidity management with room for greater discretion. Central banks could alter the issuance, auction, maturities and settlement rules. However, there would be problems of coordination when a central bank paper is issued alongside those of government Treasury bills.

Further challenges include the lack of coordination amongst the three tiers of government and constant disagreement over the broad macroeconomic policy objectives to be achieved. For effective monetary and fiscal policy coordination, all tiers of government need to enact the fiscal responsibility legislations and other legal aspects of reforms such as the public procurement legislation and adopt due process certification, public accountability and transparency in budget formulation and execution. Given the structure of Nigeria's fiscal federalism, the challenge of applying fiscal rules at the sub-national level needs to be overcome for the effectiveness of policy coordination. This is the more apparent given that the current revenue-sharing formula allocates nearly half of the total revenue to the lower tiers of government that are also directly responsible for nearly half of consolidated government expenditure. Besides, the lower tiers of government possess considerable independence in their expenditure decisions, thereby significantly possessing the capacity to influence the design and implementation of appropriate public policies. It is thus important for State Governments to improve budget transparency, strengthen public expenditure management practices and adopt, the due process procedures, by formulating and implementing credible public procurement legislations.

Another challenge is the absence of constitutional provisions backing the creation of an excess crude account (a sovereign wealth fund) where excess revenues could be saved. The constitution provides that all revenues should be transferred to the Federation Account and shared among the three tiers of government.

Overall, effective coordination between the monetary and fiscal authorities in the future will depend not only on existing institutional arrangements but also on the

recognition of the imperativeness of such coordination as fundamental to macroeconomic growth and development of the country. More importantly, the political authorities at all levels of governance must come to terms with the fact that the sustainability of the public debt is in the overall interest of the country as such, unbridled fiscal operations that build up a huge stock of public debt and distorts monetary operations will retard the economic growth of the country.

CHAPTER 8

HOW MONETARY POLICY AFFECTS YOU

8.1 Monetary Policy and You

The ultimate objective of monetary policy is to promote sound economic performance and high living standards for the citizens. This gives the citizens confidence in the currency as a store of value, unit of account and medium of exchange, so that they can make sound economic and financial decisions.

Monetary policy impacts on the wellbeing of individuals depending on the policy measures put in place. For instance, monetary policy affects welfare by influencing the cost and availability of credit. An expansionary monetary policy reduces the cost of credit and thus, boosts investments. This would in turn increase output and employment and thus wellbeing. The reverse also holds when the monetary authorities seek to pursue a restrictive monetary policy.

The choice of the direction of monetary policy is contingent on prevailing economic and monetary conditions. Consequently, during a period of economic boom, the authorities could decide on non-accommodating monetary policy, by reducing the growth in money supply. The converse takes place when the authorities want to boost economic activities. That is, the monetary authorities can increase the supply of money to the economy when it discovers that money is needed to grease the economic machinery for growth and development. Economic agents are thus, encouraged to borrow more money for investments or personal consumption. This will increase the demand and supply of goods and services which will in turn make producers to employ more people or machines to produce more goods and services to meet the high levels of aggregate demand and eventually, higher levels of employment would be achieved in the economy.

Monetary policy also impacts the lives of individuals because of the influence of money supply on the allocation of resources in the economy. Money supply in the economy can be controlled if the monetary authorities observe that the supply of money is growing faster than the economy's capacity to produce goods and services. If the monetary authorities do not intervene to control the growth in money supply under the circumstance, it will lead to demand pull inflation. This is a signal that the amount of money in circulation is more than what the current volume of goods and services produced could optimally accommodate, and this is likely to be inflationary. If money supply is not controlled, economic agents would be discouraged from planning and further

investment as they consider that their investments are not secure. This is because when there is inflation, the value of investments and currency holdings would be eroded. Rising inflation rate makes economic and financial environments unpredictable

Monetary policy also gauges the expectation of the markets about future prices. When people in the financial markets think the central bank is not focused on containing inflation, they will be worried that inflation might accelerate over the next few years. They will then add a risk premium to long-term rates making the rates higher. This implies the market expectations about monetary policy tomorrow have a substantial impact on long-term interest rates today. The monetary authorities try to address market expectations through a policy of moving gradually once they start changing interest rates or by disclosing the stance of policy in the foreseeable future.

Policy-induced changes in real interest rates affect the public's demand for goods and services mainly through changes in borrowers' costs, the availability of bank loans, and the wealth of households to purchase durable goods. A decrease in real interest rates lowers the cost of borrowing, which leads businesses to increase their level of investment spending, which would in turn lead households to buy more durable goods.

Lower real interest rates and a stable macroeconomic policy environment may increase banks' willingness to lend to businesses and households. This may increase spending especially by smaller borrowers who have limited access to credit, other than from banks. Lower real interest rates also make common stocks and related investments more attractive than bonds and other debt instruments resulting in the rise of stock prices. Households with stocks in their portfolios find that the value of their holdings is higher and the resultant increase in wealth makes them willing to spend more. Higher stock prices also make it more attractive for businesses to invest in plants and equipment by issuing stocks.

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GLOSSARY OF SELECTED TERMS

Aggregate Demand: The total amount of goods and services demanded in the economy at a given price level and at a given time period. Aggregate Demand (AD) = $C + I + G (X-M)$ C = Consumption. I = Investment .G = Government expenditures X = Exports. M = Imports.

Anchoring Country: The home country which is determining the value of its currency based on the exchange rate of the currency of its major trading partner is the anchored country.

Capitalization of Assets: This refers to a situation where a company acquires new assets with a long-term lifespan that can spread out the cost over a specified period of time.

Core Inflation: A measure of inflation that excludes certain items that face volatile price movements. Core inflation eliminates products that can have temporary price shocks because these shocks can diverge from the overall trend of inflation and give a false measure of inflation. This is also the underlying inflation in a country.

Country Currency: A country's currency can refer to a particular currency, for example, the Naira, coins and banknotes of a particular currency, which comprise the physical aspects of a nation's money supply.

Discount Window Operations: The lending facility of the central bank through which commercial banks borrow reserves.

Gilt-edged Instruments: This is fixed income or index-linked bonds issued strictly by the government.

Headline Inflation: The prevailing inflation rate as reported through the Consumer Price Index (CPI) that is released monthly by the National Bureau of Statistics. The CPI calculates the cost to purchase a fixed basket of goods as a way of determining how much inflation is occurring in the macro economy.

Income Velocity: The average frequency with which a unit of money is spent in a specific period of time. It is also called velocity of circulation.

Liquidity Surfeit. Excess liquidity in the economy.

Monetary Aggregate: Measure of the money stock, the sum of highly liquid assets that serve as media of exchange, standard of GDP, deferred payment or store of value.

Monetary Programme: A method of forecasting the net financing capacities of the individual institutional sector, the key monetary aggregates, the balance sheet of the Central Bank and the consolidated balance sheet of the banking system.

Money Multiplier: The maximum amount of money that an initial deposit can be expanded with a given reserve ratio.

Nominal Anchor: A government policy that provides stability to an economy at the expense of some of that government's autonomy. For example, if a government pegs its currency to another, it reduces the uncertainty in exchange rates but also gives the government less ability to combat inflation or otherwise change the money supply.

Quasi Money: Deposits held in the bank that cannot be used as direct means of payment; includes savings, fixed and foreign currency deposits.

Real Exchange Rate: The purchasing power of two currencies relative to one another. While two currencies may have a certain exchange rate on the foreign exchange market, this does not mean that goods and services purchased with one currency cost the equivalent amounts in another currency.

Recession: A period of general economic decline; typically defined as a decline in GDP for two or more consecutive quarters. A recession is typically accompanied by a drop in the stock market, an increase in unemployment, and a decline in the housing market.

Seigniorage: The profit that results from the difference in the cost of printing money and the face value of that money.

Spot Market: A market in which commodities, such as grain, gold, crude oil, or RAM chips, are bought and sold for cash and delivered immediately.

Standing Deposit Facility: A central bank facility available to counterparties on their own initiative. Deposit money banks deposit their excess with the central bank at an interest rate below the policy rate instead of investing it elsewhere or holding onto it.

Standing Lending Facility: A central bank facility available to counterparties on their own initiative. The deposit money banks in need of short term bridging loans get such facilities from the central bank, acting as lender of last resort.