UNDERSTANDING MONETARY POLICY SERIES
NO 20

PRICE STABILITY IN NIGERIA

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Understanding Monetary Policy Series are designed to improve monetary policy communication as well as economic literacy. The series attempt to bring the technical aspects of monetary policy closer to the critical stakeholders who may not have had formal training in Monetary Management. 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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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

“By 2015, be the model Central Bank delivering Price and Financial System Stability and promoting Sustainable 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 sector”

Core Values

- Meritocracy
- Leadership
- Learning
- Customer-Focus
MONETARY POLICY DEPARTMENT

Mandate
To Facilitate the Conceptualization and Design of Monetary Policy of the Central Bank of Nigeria

Vision
To be Efficient and Effective in Promoting the Attainment and Sustenance of Monetary and Price Stability Objective of the Central Bank of Nigeria

Mission
To Provide a Dynamic Evidence-based Analytical Framework for the Formulation and Implementation of Monetary Policy for Optimal Economic Growth
The understanding monetary policy series is designed to support the communication of monetary policy by the Central Bank of Nigeria (CBN). The series therefore, provides a platform for explaining the basic concepts/operations, required to effectively understand the monetary policy of the Bank.

Monetary policy remains a very vague subject area to the vast majority of people; in spite of the abundance of literature available on the subject matter, most of which tend to adopt a formal and rigorous professional approach, typical of macroeconomic analysis. However, most public analysts tend to pontificate on what direction monetary policy should be, and are quick to identify when in their opinion, the Central Bank has taken a wrong turn in its monetary policy, often however, wrongly because they do not have the data for such back of the envelope analysis.

In this series, public policy makers, policy analysts, businessmen, politicians, public sector administrators and other professionals, who are keen to learn the basic concepts of monetary policy and some technical aspects of central banking and their applications, would be treated to a menu of key monetary policy subject areas and may also have an opportunity to enrich their knowledge base of the key issues. In order to achieve the primary objective of the series therefore, our target audience include people with little or no knowledge of macroeconomics and the science of central banking and yet are keen to follow the debate on monetary policy issues, and have a vision to extract beneficial information from the process, and the audience for whom decisions of the central bank makes them crucial stakeholders. The series will therefore, be useful not only to policy makers, businessmen, academicians and investors, but to a wide range of people from all walks of life.

As a central bank, we hope that this series will help improve the level of literacy in monetary policy as well as demystify the general idea surrounding monetary policy formulation. We welcome insights from the public as we look forward to delivering content that directly address the requirements of our readers and to ensure that the series are constantly updated as well as being widely and readily available to the stakeholders.

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Central Bank of Nigeria
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PRICE STABILITY IN NIGERIA

Oluwafemi I. Ajayi

SECTION ONE

Introduction
Price stability is a state of low and stable inflation which has no substantial effect on people’s economic condition. Economic agents such as firms, households and government are often worried about the impact of increasing prices because of its costs on their incomes and the general welfare of the people. Such uncontrolled price increases make it difficult for these economic agents to effectively plan and efficiently deploy their resources to achieve their immediate and future goals in the economy. Globally, the core objective of central bank is to keep inflation low and stable and this is what is referred as the objective of price stability.

In Nigeria, monetary and price stability is the central objective of the Central Bank of Nigeria. This function is executed through monetary policy. Monetary policy is simply defined as the use of various instruments to control the supply of money in the economy. The essence of controlling money supply is because its increase may raise the level of inflation, and its reduction can bring down the level of inflation in the economy. Inflation is considered an enemy to some economic agents because of some obvious reasons; first, high inflation undermines the capacity of the economy to generate gains in output, incomes and employment; second, for those with fixed income, it wears away the value of their investments income and social well-being; third, it encourages high speculative deeds in the financial markets relative to the investments that boost production activities, and enables firms to compete both domestically and internationally. The major objective of this paper is to highlight the purpose, function and instruments needed for the achievement of price stability in Nigeria. The paper will also highlight the major challenges and policy recommendations needed for achieving and sustaining price stability in the Nigerian economy. In doing this, the paper intends to create awareness for the public, on the role of

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1 This publication is not a product of vigorous empirical research. It is designed specifically as an educational material for enlightenment on the monetary policy of the Bank. Consequently, the Central Bank of Nigeria (CBN) does not take responsibility for the accuracy of the contents of this publication as it does not represent the official views or position of the Bank on the subject matter.

2 Oluwafemi I. Ajayi is an Economist in the Monetary Policy Department, Central Bank of Nigeria.
the Central Bank of Nigeria, in achieving price stability. The rest of the paper is organized thus: section two highlights the conceptual issues in price stability while section three reviews the benefits of stability; section four discusses monetary policy instruments for the achievement of price stability, while section five highlights major challenges of price stability; section six concludes the paper with some recommendations.
SECTION TWO

Price Stability

Price stability is the general level of prices in the economy. It is a situation where prices in an economy change slowly, or do not change at all. It also connotes avoiding a prolonged inflation or deflation. Price stability helps in achieving high level of economic activity and employment. It means that prices on average are stable over time. The positive change in price level can be referred to as inflation. Inflation is the rate at which the general price of goods and services is rising over a period of time, which may eventually lead to reduction in individual purchasing power and also decline in the value of money. Inflation and deflation are key monetary/financial occurrences that have costs on the economy of any nation across the globe. Inflation has number of serious consequences on the economy which include the following:

- **Inflation wears away the value of money and assets:** High inflation will typically wear away the value of money and asset, as huge money will be used to purchase few commodities. Since inflation would reduce the real value of saving, people tend to lose confidence in money.

- **It redistributes income from lenders to borrowers:** High inflation favours borrower and make lender worse off. Savings are generally reduce in time of high inflation, particularly when savings are not index linked.

- **Social unrest/political instability:** Social unrest cannot be avoided when there is high inflation. High inflation increases dissatisfaction among workers, as their purchasing power is consistently falling, and they may not be able to sustain or meet their daily needs. Therefore, the period of inflation, workers tend to ask for a wage increase as to maintain their standard of living.

- **It causes uncertainty:** High inflation may cause greater uncertainty for both household and firms. When there is uncertainty in the market, firms may likely suspend their investment. The decline in investment always have negative effect on the growth of the economy.

- **It can create unemployment:** Persistence inflation in the economy increase level unemployment. This is as a result of high interest rate as people may not be able to access loan hereby leading to business cut and reduction in output level which may eventually leads to retrenchment of worker.
• **Shoe leather cost:** This refers to the cost of effort and time that people may likely spend in trying to counter the effect of inflation, especially when people hold fewer cash and make additional trip to the bank in order to save on the losing interest.

**Types of inflation**

1. **Creeping Inflation:** This type of inflation refers to slow and persistent rise in the general price of goods and services over a period of time. It is also known as mild inflation or moderate inflation. Creeping inflation is seen as moderate inflation because it is always in a single digit.

2. **Chronic Inflation:** Persistence in creeping inflation often leads to what is called Chronic Inflation. It is a situation where a country experiences high inflation for several years or decades due to uncontrolled expansion or increase of the money supply in the economy. It may lead to Hyperinflation if it continues to grow for a longer period of time without any decline.

3. **Walking Inflation:** This is a situation where the general rise in price of goods and services is more than 3.0 percent for a period of time. It is called walking inflation because it is greater than 3.0 percent but less than 10 percent in a year. Walking inflation could lead to running inflation, if its signal is not properly monitored. Additionally, if walking inflation is not checked at the appropriate period or time, it can finally result in Galloping inflation.

4. **Running Inflation:** This is double digit inflation and considered to be between 10 to 20 percent per annum. It refers to a situation where there is rapid increase in the rate of the general price of goods and services above 10 per cent in a year. The range for measuring this type of inflation has not been fixed, but when prices rise by more than 10.0 percent per annum, it is considered to be running inflation.

5. **Galloping Inflation:** This is a situation where the inflation of a country increases speedily and seems to be persisting or unstoppable. Another name for galloping inflation is termed Hyperinflation, and this often occurs in a county during economic crisis, war and socio-political disturbance. If the general price of goods and services rise by double or triple digit per annum it is said to be galloping inflation. Galloping inflation occurs when prices of goods and services rise by more than 20% but less than 1000% per annum.
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annum. India and some Latin American countries such as Argentina, Brazil had experienced galloping inflation in the 1970s and 1980s.

2.1 Measuring Price Changes
Measuring changes in prices is a complex problem. In solving this problem, the government statisticians require an instrument that can properly capture movement or changes in the economic variable. The instrument or the device applied in measuring changes in price is called index. Generally, it is difficult for statistician to keep a precise record of all price changes of all goods and services in the economy over a period of time. At monthly intervals, it is the use of an index that enables statisticians to measure or have a clear picture of development in the average price change for a sample of goods and services.

The Consumer Price Index (CPI) is the official price index currently used in Nigeria to measure price changes. According to the Nigerian Bureau of Statistics “the CPI measures the average change over time in prices of goods and services consumed by people for day-to-day living”. To do this, samples of goods and services that are representative of the Nigerian economy are put together and referred to as a market basket, and the price of the basket are computed and compared over time. The CPI is a combination of statistical techniques and economic theory to analyse sample data from field/survey, in producing weighted measure of the average change in price in the economy. All the selected items are captured using weighting method to see their relevance in the entire index. To compute changes in price, informants move across the country to obtain data from the field, which are then aggregated for the computation of the CPI.
The CPI is used to capture the changes in the general price level and not the rise or fall in the price of one particular good and service. It can also be used to analyze and determine the purchasing patterns of consumers for goods and services that can be considered as true representative of the average consumer in the economy.

### 2.2 Benefits of Price Stability

Price stability has a number of positive impacts on economic activity:

i. It promotes high standard of living: In a general context, both inflation and deflation have their consequences of cost related to the economy. A stable price prevents all the disadvantages of inflation and deflation, and thus improves the standard of living and general economic welfare of the citizens. For instance, it improves the level of employment and encourages investments.
ii. Reduces uncertainty about general price development: in a state of price stability, it is easier for firms and individuals to make right decision on investment and consumable goods. It allows people to identify changes in price of goods and services.

iii. It reduces inflation premium risk: Creditors may decide not to ask for inflation risk premium as a compensation for the risk associated with holding nominal assets for a period of time, if they are sure that prices would remain stable in the future. Monetary policy becomes more effective in a situation where real interest rate has low risk premium, and consequently boosts the capital market and make investment more attractive. In this sense, employment opportunity will increase and economic welfare will improve.

iv. It helps to avoid unnecessary hedging activities: low and stable inflation stops businesses and individual from moving away resources from productive uses in order to escape inflation. High inflation provides an incentive to accumulate real goods in as much they retain their value. However, hoarding goods harms economic welfare.

v. It increases the benefit of holding cash: Generally, inflation brings about high transaction cost and therefore, increases household demand for cash.

vi. It prevents the arbitrary distribution of wealth and income: low and stable inflation prevents substantial and arbitrary redistribution of wealth and income that could arise, where there is high inflation, and where price trends change, in unpredictable ways. The segment that suffer most from inflation are the weakest in the society, because of their limited possibilities to hedge against inflation. It is common to have social and political instability where the inflation rate is very high.

vii. It contributes to financial stability: price stability enhances financial stability because it helps to avert inflationary and deflationary shocks.

viii. Price stability contributes to broader economic goals: Maintaining price stability would largely contribute to attaining economic goals, such as reduction in unemployment level and increase in standards of living as well as high level of economic activity.
SECTION THREE

Factors that Affect Price Stability

Generally, prices determine the level of demand and supply in a free market economy. A lot of factors also affect the demand and supply of goods and services, examples are technology, innovation, weather, productivity, purchasing power of people, consumer preferences and the price of the good etc. Mostly, price of agricultural goods such as rice and beans fall during their harvest period as a result of greater supply while prices of items such as tomatoes will rise as result of drop in production during dry season. Also, the price of goods and services tends to increase during the festive period as demand tends to outstrip regular supply. However, changes in prices arising from seasonal factors will readjust themselves within a short period of time, as some of the seasonal factors are temporary in nature. Consequently, more money in people’s hand without a proportionate increase in goods and services that is available in the economy is the primary demand side factor contributing to inflation. Likewise, when people have too little money to spend, production suffers, as there would be reduction in demand for goods and services which might lead to slow economic growth and higher unemployment. Thus, economists have agreed that in the long run inflation occurs as a result of increase in money supply when compared with the level of economic activities.

![Broad Money Growth and Headline Inflation (2003 - 2013)](image)

CBN

3.1 Fundamental Factors Affecting Monetary Expansion

The Central Bank Nigeria is the major supplier of money to the economy. The Central Bank has two major channels of supplying money to the economy. One is to lend to the government or to the Deposit Money Banks (DMBs). Government runs into deficit when its revenue is lesser than the expenditure and the deficit is
financed through borrowing. When a central bank lends money out to the government or the DMBs, it leads to outflow of currency from the central bank’s vaults. These will result to an asset to the banking system and the general public, once the government uses such money to finance its expenses. Equally, in a situation where government pays its debt, money moves into the central bank’s vaults from circulation, and it lies in the vaults idle as form of minted coins and printed paper. The foreign exchange market is another channel as when the central bank purchases foreign exchange from the DMBs or government using domestic currency, it expands currency in circulation. Equally, when the central bank sells foreign exchange to the DMBs or government, money moves back to the central bank, thereby reducing currency in circulation. The Creation of deposits and credits is an activity of the DMBs that always leads to change in money supply. Most depositors only withdraw part of their deposits in the banking system, which allows DMBs to create credit simply, because they have deposits with them. In this process, the acquisition of financial assets by the DMBs, and the creation of credit to both public and private sectors are the major factors affecting money supply in the economy. The central bank could influence monetary expansion by the sale or purchase of treasury bills in the domestic market, or by inducing the changes in the cost of fund.
Monetary Policy Management for Price Stability in Nigeria

Monetary policy formulation and implementation is the responsibility of the Central Bank of Nigeria (CBN). This responsibility was established through the Central Bank of Nigeria Act 1958. This act gave exclusive responsibility to the CBN to formulate and execute monetary policy in Nigeria. This power to the CBN was curtailed between 1968 and 1970 by subjugating the CBN under the supervision of the Federal Ministry of Finance. The power to formulate and execute policy was restored by the CBN Act 1991, while the amendment made in 1997 still curtailed the supervisory power to the Federal Ministry of Finance. This situation was reversed with the Central Bank Act of 2007. The 2007 Act gave the CBN monetary authority with instrument authority, in line with world best practice.

**MONETARY POLICY DECISION MAKING BODY**

The Central Bank of Nigeria enjoys independence from the government in order to achieve the objective of price stability. The decision making body seeks no instruction from any other bodies but work with some government institution to achieve price stability. The Bank is not subject to any potential political pressures.
4.1 Instruments of Monetary Policy

A central bank uses monetary policy to guide its money supply in order to stay on the track of achieving its primary objectives of price stability (or low inflation rate), full employment, and growth in aggregate income. The instruments of monetary policy used by central bank depend on the level of development of the economy, especially the financial sector. These instruments could be direct or indirect.

I. Open Market Operations (OMO): This is the sale and purchase of securities by the central bank, and is the most vital and flexible instrument of monetary policy. Central banks can increase the amount of money in the economy by purchasing securities and may also sell securities to reduce liquidity in the system. The instruments that are frequently used for the purpose of expansionary or contractionary monetary policy include central bank bills, treasury bills and commercial papers.

II. Discount Window Operations: One of the functions of the central bank is to serve as lender of last resort. Central banks use Discount Window Operations to enable the deposit money banks to borrow in form of short term (usually overnight). The loan is given to the DMBs at a certain percentage above the policy rate. The policy rate, which is the anchor rate, sets the floor for the interest rate in the money market and thereby affects the supply of credit, the supply of savings and the supply of investment.

III. Moral Suasion: This is persuasion strategies used by the central bank to influence and regulate the operations of the deposit money banks. The central bank use this instrument to persuade the DMBs to follow definite paths such as credit expansion or ceiling, savings mobilization, etc, to support financial stability, which otherwise they may not have undertaken due to the risk/return assessment.

IV. Reserve Requirement: This is a situation where the central bank may require the DMBs to hold a fraction of their deposit liabilities as vault cash, and or deposits with it. This reserve requirement limits the amount of loans that banks can make to the domestic economy and thus limit the supply of money.

V. Lending by the Central Bank: At times, central bank make available credit to DMBs, hence the monetary base and the level of the reserve is affected.
VI. **Interest Rate:** Central banks use monetary policy rate (MPR) or the minimum rediscount rate (MRR), to lend money to financially sound DMBs at a most favourable rate. The MRR/MPR serve as the nominal anchor rate that gives direction to the money market, thus affecting the supply of money and monetary aggregate and full employment as well as the GDP.

VII. **Direct Credit Control:** when central banks deploy credit ceilings to channel credit to certain sector of the economy, they direct the DMBs on the maximum amount of loans that the DMBs can extend to different economic sectors. Under this approach, the available investments or savings are channeled and/or invested directly to specific sectors.

Until about 1993 when OMO was introduced, the CBN relied almost exclusively on varying combinations of direct instruments of monetary control from time to time. These instruments included: credit ceilings, sectoral credit allocation, interest rate controls, imposition of special deposits, moral suasion, movement of government deposits, stabilisation securities and exchange controls, etc. As the financial markets deepened over time as a consequence of the economy-wide macroeconomic reforms that commenced the mid-1980s, the CBN started the process of shifting from the use of direct instruments to market-based instruments. The most significant move in the new direction came in June 1993 when the Bank introduced OMO. Currently, OMO is the major instrument of monetary policy at the CBN. Other supporting instruments are discount window operations, moral suasion, forex sales and the standing facility introduced in December 2006.

**The Transition Mechanism of Monetray Policy**

![Diagram](image)

*Source: Central Bank of Nigeria*
The monetary policy transmission mechanism is the process by which changes made by the monetary authority (central bank), affects the general price level of goods and services in the economy. Monetary policy changes have different channels through which it could be transmitted to the economy (Figure 1). These channels are as follows:

1. the interest rate channel
2. the credit channel
3. the exchange rate channel
4. the wealth channel

Out of all these, most developing countries, has been placing greater emphasis on the interest rate and credit channels as the most effective channel of transmitting monetary policy. It should be noted that there are different and long lags in the process of transmitting the monetary policy. Sometimes it takes one and half years for policy instruments to impact from the intermediary targets to the final targets which are prices and output.
Challenges to the Achievement of Price Stability in Nigeria

The achievement of price stability is faced with challenges, some of which are discussed below:

(i) Fiscal imbalance: is the mismatch in the government revenue and its expenditure. This is a situation where revenues of the government do not match expenditures for all tiers of government. Under this condition, the future debt obligations of a government are different from the future income streams. It provides a temptation to inflate away the value of the government’s outstanding debt, and this possibility may become embedded in inflation expectations. Mostly, deficit problem could be resolved by fiscal policies or change in the national saving rates. In such a case, creditors might believe that debtor governments will resort to inflationary policies.

(ii) Extraordinary Liquidity Crises. The central bank as a lender of last resort is meant to supply liquidity in time of financial distress in the economy. The central bank intervention would be appropriate to stem of financial market havoc, but the level of intervention is a question that may have long term consequences on inflation expectations.

(iii) Another major challenge of monetary policy is the unpredictability forecasts of medium-term expenditure and revenue of the three-year frameworks. The estimated revenue from oil determine the size of the budget, and Government may resort to the banking system to meet its financing needs if the expected revenue is affected by unstable price shocks from the global oil commodity.
SECTION SIX

Conclusion
In summary, the maintenance of price stability is the core objective of Central banks all over the globe. This objective of price stability has many benefit associated with it in an economy, while inflation has severe adverse social, economic and political impacts. Extreme money supplies always form the basis for inflation, although there may be other factors that could also put pressure on prices. Thus, the containment of inflation, which is referred to as price stability, should be most important goals of monetary policy. This does not mean that monetary policy alone is sufficient to maintain price stability; other macroeconomic policy should not be isolated in carrying out monetary policy. Government policies (Fiscal policy) such as taxes, deficit financing and expenditure should be considered along with monetary policy to be able to achieve the central bank price stability objective. Also, pursue Income policy that relates to wage setting and productivity gains can be pursued.
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