Macroeconomic Stabilization Goal, Policy and Instruments

Emeka Nkoro
Economics Department, University of Port Harcourt, Port Harcourt, Harcourt, Nigeria.

Aham Kelvin Uko
Abia State Ministry of Environment, Abia State, Nigeria

Abstract

This paper gives an overview of the concept of macroeconomic stabilization and, its measurement, goals and policy instruments. It starts with a review of the concept, measurement and goals of macroeconomic policy and, the goals performance measurement. After this, the paper looks at macroeconomic policies and its instruments, and macroeconomic stabilization problems. The next section examines the applicability of the stabilization instruments under various economic conditions and, this section is followed by a conclusion.

Key Words: Macroeconomic Stability, Policy, Measurement Performance, Policy Mix.

JEL classification: E01, E60, E61, E63.

Introduction

A society has to achieve stability in various facets of its existence so that it can make progress. This stability must be realized in various fronts-economic, political, social etc. This is what is referred to as stabilization which is a process of altering the behaviour of a system to induce it to return to equilibrium (or normalcy) after a disturbance from either within or outside. To achieve economic stability is what macroeconomic/economic stabilization is all about. Macroeconomic stabilization is achieved through the implementation of macroeconomic policy.

Macroeconomic policy focuses on the achievement and maintenance of output stabilization in the short run and self-sustained economic growth in the long run. In the short run, the achievement of output stabilization is also referred to as macroeconomic stability. This is achieved by ensuring balance of payments equilibrium and full employment without inflation. The minimization of vulnerability of the above factors shock will in turn increases the prospects for sustained growth in the long run. Therefore, short run macroeconomic stabilization essentially means the prevention of excessive expansion or contraction of output. Macroeconomic stability can be achieved only when there is absence of excessive fluctuations and volatility in the macroeconomic environment. This highlights the fact that macroeconomic stabilization focuses on preventing significant cyclical fluctuations in the level of output, employment, prices, and the
balance of payments. The interaction of stabilization policies and the above indices may either lead to economic stabilization or destabilization. However, macroeconomic instability will present an excessive degree of uncertainty.

The rest of the paper is organized as follows: section two addresses measurement of macroeconomic stability, macroeconomic stabilization policy goals, stabilization policy and its instruments, the problems of macroeconomic Stabilization. Section three focuses on stabilization policy instruments and their application while four deals with the conclusion.

**Measurement of Macroeconomic Stability**

As specified by Maastricht Criteria (1992) of The Treaty on European Union, Macroeconomic stability is measured by five indices.

- **Low and stable inflation:** This indicates a healthy demand in the marketplace, while high or unstable inflation generates uncertainty in the marketplace and then, threatens growth. The Maastricht criteria prescribed inflation to the range of 3%.

- **Low long-term interest rates:** The low rates imply that the economy is stable and is likely to be sustained. Low long-term interest rates are a reflection of stable future inflation expectations while high long-term rates imply higher inflation to come. The Maastricht criteria prescribed long-term rates to the range of 9%.

- **Low national debt relative to GDP:** indicates that a low national debt gives room for flexibility of fiscal policy in times of crisis. The Maastricht criteria prescribed debt ratio to the range of 60% to GDP.

- **Low deficits:** Indication of fall in the national debt. The Maastricht criteria prescribed the deficit ratio to the range of 3% to GDP.

- **Currency stability:** This implies that long-term trade-growth strategies can developed and as well reduction exchange-rate risk management. Currency stability reduces the threat posed by foreign debt. The Maastricht criteria prescribed fluctuation of at most 2.5%.

**Macroeconomic Goals**

The aim of macroeconomic policy is the achievement of macroeconomic goal stabilization. The goals of macroeconomic policy are:

- **Full employment**
- **Price stability**
- **A reasonable economic growth rate**
- **Balance of payments equilibrium**
- **Equitable distribution of income**
- **Minimum Debt**

**Full Employment**

This goal ranked first among foremost economic goals. But there are is no consensus on the meaning of full employment. However, we may limit ourselves to the definition that defines full employment as the optimum utilization of labour resources available in an economy in producing goods and services. This doesn’t mean that other resources-capital, land and entrepreneurship- are not important to this goal. This goal is achieved when there is high level of employment or low level of involuntary unemployment. This ranges between 96-97 percent or 3-4(frictional and structural unemployment) percent respectively.

Full employment is a measure of an economy’s labour force:
Economic measure of total labour force \((T_{LF}) = \text{Population} - \text{unables} - \text{voluntary}\).

Unables are those that can not work due to mental illness, institutionalized, age and unwell while voluntary are those that are unwilling (leisure class) to work. 18-70 year-olds are the labour force bracket

Empirical measure of total labour force \((T_{LF}) = \text{employed}(T_{E}) + \text{unemployed and the underemployed}(T_{U})\). i.e \(T_{LF} = T_{E} + T_{U}\).

Empirical concept of labour force includes sole proprietors, the self-employed, part-time and full-time workers and over-time workers. It excludes all persons engaged exclusively in housework in their homes and those who are attending school.

Employed labour: are those who are willing and able to work at the prevailing wage rate, and currently engaged in jobs.

Unemployed labour: are those willing and able to work at the prevailing wage rate, but cannot find jobs.

Underemployed/Disguised labour: are those that are employed in work below the level of their potentials because they are unable to find jobs that suit their qualification, e.g., volunteers and part-time workers. Underemployment is measured on the basis of lost man-hours of work.

Total Labour Force Participation Rate \((T_{LFP})\): this is the ratio of the labor force to the population. It is calculated as a percentage of the total population. Thus:

\[ T_{LFP} = \frac{T_{LF}}{\text{Population}} \times 100 \]

Price Stability

This involves keeping inflation at bear or keeping inflation rate of no more than 2 or 3 percent annually. This is aimed at keeping the value of money stable. The goal is said to be achieved when prices, production, employment, income and wealth remain unchanged. Price stability is beneficial as uncertainty and disruptions can be avoided.

Measurement of Price Stability

In order to have an appropriate measurement of general price level, index numbers have been employed by statisticians. Using this approach, general price level is measured by the annual percentage change in the price index. Price index is a composite measure of the general level of prices (inflation) at a point in time. This index shows year-on-year changes in various economic measures, such as inflation rate, unemployment rate and income growth rate.

\[ P = \% \Delta PI = \frac{(PI_1 - PI_0)}{PI_0} \]

Where \(P\) is price stability, \(\Delta PI (PI_1 - PI_0)\) is change in price index while \(PI_1\) is current price and \(PI_0\) is base year price.

Price stability or inflation can be measured using different price indexes, such as:

The Consumer Price Index (CPI): Covers the general level of prices paid by households for a fixed basket of goods and services. It is calculated monthly on national and regional bases. It is calculated as:

\[ PI = \frac{\text{Sum of Current Prices} - \text{Sum of the base year prices}}{\text{Sum of Base Year Prices}} \times 100 \]

The Core Consumer Price Index (CCPI): This is the same as CPI, but excludes prices that are extremely volatile, for example, food and energy prices.

The Wholesale or Producer Price Index (PPI): Covers the general level of prices paid by businesses for raw materials, semi-finished goods, and capital equipment. It is calculated monthly. Movements in the PPI tend to affect future movements in the CPI and the Implicit GDP Deflator as changes in factor input prices manifest in final goods and services.
The Core Producer Price Index (CPPI): This is the same as PPI, except that it excludes inputs whose prices are extremely volatile, for example, food and energy prices.

The Implicit GDP Price Deflator: Most important technique of determining general price level. Unlike CPI, GDP price deflator is not based on simple survey rather on GDP. This is on every final good and service produced in the economy. It measures general prices level of goods and services purchased by consumers, businesses and government. This includes components of CPI and PPI as well as the cost of construction and imported goods. It is calculated by taking the GDP at factor cost at current prices and, dividing by GDP at factor cost at constant prices. Thus:

\[
\text{GDP Deflator} = \frac{\text{Nominal GDP}}{\text{Real GDP}} \times 100
\]

The multiplication of the ratio by 100 gives an index number that takes the value of 100 for the base year.

Performance Measurement

Given \( P = \frac{(P_1 - P_0)}{P_0} \times 100 \), the general level of price can be assessed.

Inflation: a sustained increase in the general prices level. During inflation, not all prices rise, some prices may be falling, but those prices which are increasing tend to pull up the general level of prices.

Deflation: a persistent decrease in the general prices level. During deflation, not all prices fall, some prices may be rising, but those prices which are decreasing tend to pull down the general level of prices.

Disinflation: a persistent decrease in the rate of inflation. This is a general level price rise, but less than the previous year’s amount.

Disdeflation: a persistent decrease in the rate of deflation. This is a general level of price fall, but less than the previous year’s amount.

Price stability: no change or a bearable change of 2-3 percent in the general prices level. No inflation or deflation. During price stability, individual prices change, that is, may increase or decrease, but the overall level of prices does not change.

Headline inflation: measures annual percentage change in a price index that includes volatile prices for food and energy.

Core inflation: measures annual percentage change in a price index that excludes volatile prices for food and energy.

Economic Growth

This is one of the major goals of macroeconomic policy for a long time. It is an important indicator of the performance of an economy and often referred to as the economy’s aggregate output. Economic growth can be seen as the increase in the productive capacity of the economy leading to an increased availability of goods and services in the economy over some given period of time (Ohale and Onyema, 2001). With economic growth, society gets more goods and services that satisfy more wants and needs, people are better off and standard of living rises. In the opinion of Obadan(2012), economic growth is a desirable goal, but should lead to economic development. Economic growth and development should result in equitable income distribution.

Measurement of Economic Growth

It is a measure of an economy’s total output or production. Total output is measured in two ways: Gross National Product and Gross Domestic Product.

Gross National Product (GNP)

This is the basic social accounting measure of the total output of goods and services. GNP measures the total market value of all final goods and services produced by the nationals of a country, whether they are resident within or outside the country during some period of time, usually one year. Technically, it is defined as: \( \text{GNP} = \text{GDP} + \text{net property income (NPI)} \) abroad.
GNP = GDP + NPI.

**Gross Domestic Product (GDP)**

GDP measures the total market value of all final goods and services produced on domestic soil of a nation by both national and non-nationals of a country during some period of time, usually one year. Technically, it is defined as: GNP = GDP minus net property income abroad.

\[ \text{GNP} = \text{GDP} - \text{NPI} \]

**Nominal Output**: valuing all outputs in money terms at current prices. It is a price-weighted measure of total output. It is also referred to as money output.

\[ Y = PQ \]

Where Y is nominal output, P is the vector of prices used to weigh the quantity of outputs and, Q is some measure of the quantity of output. The major problem of nominal measure of output is that output rises when prices (P) rise without increase in productivity.

\[ \Delta Y = \Delta PQ \]

Because of this problem, statisticians have device an alternative measure that corrects for increase in prices. Once this done, we have real output.

**Real Output**: Valuing all outputs at the prices that prevailed in a particular year, known as base year. It is a price-deflated measure of the real quantity of output that is produced.

\[ Q = \frac{Y}{P} \]

Where Y is nominal output, P is a price index from some base year, and Q is the amount of real output.

**Real Output Per Capita**: measures how much real output produced is on the average per person in the country.

\[ \text{Real Output Per Capita} = \frac{Q}{N} = \text{Real Income Per Capita} \]

Where Q is total output, N is total population.

Real output per capita is introduced to account for change in population size. This is because changes in real national income may not represent the true well-being of the citizens if changes in population size have not been corrected.

This method of employing constant price measurement makes comparison across time more meaningful as it relates to economic performance. However, real output is seen as approximation for the total output produced by an economy, hence, it is an imperfect measure of an economy's real performance

**Performance Measurement**

According to Furfero (2012), output Maximization may be measured statically, at a point in time, or dynamically, over time.

**Static Economic Performance**: this is measured by the gap between actual real output and potential real output or natural real output of an economy over some period of time. Actual real output is the ex-post or realized real output of an economy. Potential real output is the ex-ante or potential real output that an economy is expected to produce if all of its resources were fully utilized. Natural real output is the maximum output that an economy can produce without an increase in the rate of inflation. This represents the amount of output at which an economy is achieving the natural unemployment rate.

\[ \text{GAP} = Q_a - Q_p \text{ or } \text{GAP} = Q_a - Q_n \]

Where \( Q_a \) is actual real output, \( Q_p \) is potential real output, and \( Q_n \) is natural real output.
Actual real output in the short run, could be less than, equal to, or greater than potential real output or natural output depending on the actual employment rate or actual rate of inflation respectively.

\[ \text{GAP} = Q_a < Q_n \] - the economy has negative gap. The economy is underperforming. This leads to loss of output which indicates waste of resources above normal unemployment rate.

\[ \text{GAP} = Q_a > Q_n \] - the economy has positive gap. It is over-performing. Resources are strained, burn out too quickly and inflation rises

\[ \text{GAP} = Q_a - Q_n = 0 \] - optimum performance. The economy operates too close to its natural/potential output level.

**Dynamic Economic Performance:** Measured by the annual percentage change in real output.

Real growth rate of output is the annual percentage change in actual real output.

\[ q = \% \Delta Q = (Q_1 - Q_0)/Q_0 \]

Where \( q \) is output growth, \( Q_1 \) current output, \( Q_0 \) is previous output.

**When** \( q > 0 \), the economy is expanding- output and real income are increasing. If the economy is expanding at a slow rate and the population is growing at a faster rate; it may not possible to absorb all of the new labour coming into the market. Hence, people may be worse off.

**When** \( q < 0 \), the economy is contracting- output, real income, and employment are declining and everybody is worse off

**When** \( q = 0 \), the economy is stationery or stagnating.

Real Per capita Growth: is the percentage change in the ratio of real output to population

\[ \text{Real Per capita Growth} = \% \Delta Q /\% \Delta N = q/n \]

Where \( \% \Delta Q \) (output growth, \( q \)) is percentage change in output, \( \% \Delta N \) (population growth, \( n \)) is percentage change in population.

When \( q < n \), the level where standard of living is getting worse. When \( q > n \), the level of standard where living is improving. When \( q = n \), the level where standard of living is being stationery or stagnant.

**Balance of Payments Equilibrium**

This goal involves the maintenance of external balance. Equilibrium is desirable in balance of payments because a deficit will hamper the achievement of other macroeconomic goals. Therefore, every nation is obliged to eliminate or minimize balance of payments deficit. Balance of payments show the net value of all of the cross-border transactions for a country in a given time period. Balance of payments is divided in two accounts: the current account and the capital account.

**The Current Account**

This account shows the net value of all current period income flow. It shows how income is generated for the recipient country and are included in gross national product. This account reports trade in goods and services and unilateral transfers.

**Trade in Goods and Services:** involves the export and import of goods and services. The net value of export and import of goods and services is referred to as Balance of Trade (BoT).

**BoT (Net Export) = Exports - Imports**

Income, money supply and international reserves flow into the country that export goods and services while income, money supply and international reserves flow out of the country that engages in import of goods and services. Payments for domestic services by foreigners are regarded as exports while payments for foreign services by citizens of home country are regarded as imports.
Unilateral Transfers: consists of one-way transfers of income without something in return. Examples of unilateral transfer include: interest on government debt, government aid, reparations payments, pension payments, subscriptions to international agencies, grants by charitable foundations and remittances (gifts) by immigrants to their home countries. Adding net unilateral transfers to BoT gives us current account balance.

Income, money supply and international reserves flow into the country that exports while income, money supply and international reserves flow out of the country that engages in imports. Payments received by domestic country from foreign country are regarded as exports while payments received by foreign country from home country are regarded as imports.

Capital Account

This account shows the net value of all assets flows or transfers. The capital account finances current account transactions. Capital accounts transactions are divided into two: autonomous and accommodating transactions.

Autonomous Transactions

Autonomous transactions consist of private and public foreign direct investment and foreign indirect investment.

Net Private Capital Flows

Foreign Direct Investment (FDI): FDI entails ownership in real estate, factories, and equipment. International reserves (foreign exchanges) are transferred into the domestic country when foreigners purchase assets of the domestic country and vice versa. However, FDI in the domestic country indicates a longer-term drain on its international reserves. This is evident in the flows of rental and profit income from the ownership of the domestic country's assets which is transferred abroad. Similarly, the domestic citizens' FDI in the foreign countries represents a longer-term accumulation of the domestic country's international reserves.

Foreign Indirect Investment (FII): FII entails lending or making loans and buying corporate debt/securities. International reserves are transferred into the domestic country when foreigners lend to the home country and vice versa. However, the FII in the domestic country indicates a longer-term drain on its international reserves. This is evident in the flows of interest income from foreign lending to the domestic country. Similarly, the domestic citizens' FII in the foreign countries represents a longer-term accumulation of the domestic country's international reserves.

Net Government Capital Flows

This is similar to FII except that it involves purchasing of government debt or lending to a country's government.

Accommodating Transactions.

Accommodating transactions are undertaken to balance the gaps in the international payments accounts. They are the flows (flows of official reserves) that take place to fill any gaps that occur in autonomous transactions. These transactions are recorded in the official reserve account. It is in the official reserve account that settlement of the balance of payments in key currencies, gold or special drawing rights takes place between central banks. Whenever inflows from export transactions or borrowing exceed the outflows from imports or lending respectively, international reserves accumulate in the official reserve account. But, whenever the outflows from import transactions or lending exceed the inflows from exports or borrowing respectively, pressure is on international reserves from the official reserve account.

Causes of Current and Capital Account Imbalances

Current Account Imbalance

Changes in the Foreign Exchange Rates: Changes in the foreign exchange rate between trade partners alter the relative prices of goods and services between the countries as well as within
Changes in the relative prices of domestic and foreign commodities alter the relative attractiveness of these commodities. Appreciation of a country’s currency tends to worsen its trade balance while depreciation tends to improve its trade balance.

**Differential Rates of Real Growth:** The faster an economy grows, relative to its trading partners, the more it consumes of both domestic and imported goods. The increase in the consumption of imports tends to worsen the trade balance and vice versa.

**Differential Rates of Inflation:** Rising domestic inflation, relative to its trading partners, will reduce the domestic exports. This implies that the demand for commodities in the country with the highest rate of inflation will fall, thus reducing its exports and worsening the trade balance and vice versa.

**Capital Account Imbalances**

**Differential Real Rates of Interest:** Financial (indirect) investments are highly interest-sensitive. As a result of financial globalization, international funds flow from those countries with the lowest real rates of interest into those countries with the highest real rate of interest.

**Differential Real Rates of Return on other Assets:** Returns on direct investment include rents and profits. Rents are received from ownership of real estate, while profits are received from the direct ownership and management of production facilities. As a result of financial globalization, international funds flow from those countries with the lowest real rates of rent and profit into those countries with the highest real rates of rent and profit.

**Balancing the Balance of Payments Accounts**

This is referred to as a country’s external balance. Foreign capital flows are used to finance current account imbalances. An excess of foreign capital inflows can turn a trade deficit into a balance-of-payments surplus, and an excess capital outflows can turn a trade surplus into a balance-of-payments deficit. Any difference (inflows-outflows) is settled in the official reserve account. Stable balance-of-payments surpluses increase the foreign reserves of a country, while continuous deficits deplete the foreign reserves of a country. Once foreign reserves are depleted, trade stops or restrictions imposed.

For easy management, Macroeconomic stabilization goals are classified into two broad goals, namely; internal balance and external balance. The former (domestic macroeconomic stability) comprises of full employment, economic growth and price stability while the later (external stability) entails balance of payments equilibrium.

**Macroeconomic Policy and Its Instruments**

Macroeconomic policy is the actions of policy makers directed at influencing the levels of employment, price, output, income, exchange rate and balance of payment. These variables that policy makers seek to influence through policy choice are called policy targets. Policy targets are the goals of macroeconomic policies. These policy targets are achieved through policy instruments/variables. Macroeconomic policy instruments are fiscal policy, monetary policy, trade policy, Exchange rate policy, Income policy, and Debt management policy. However, the most important macroeconomic policy instruments for planning and management of the economy are fiscal and monetary policies which are supplemented with the other instruments when necessary (Iyoha, 2002).

**Fiscal Policy**

Fiscal policy involves the use of government’s budget to influence the level of income, employment, general price level and aggregate demand. The budget consists of government expenditures and revenue, and taxes. Hence, fiscal policy involves the deliberate manipulations of government expenditures and tax revenues to influence the level of economic activities. Government expenditures and taxes are the major fiscal policy instruments. Expenditures constitute an injection into the economy while taxes serve as withdrawals or leakages out of the economic activities and income. Increases in former raise aggregate demand and tend to increase the level of income and employment. On the other hand, increases in later
reduce the level of aggregate demand and tend to reduce level of income, employment and the general price level. Hence, an expansionary fiscal policy (intended to stimulate aggregate demand) takes the form of either an increase in government expenditures or reduction in taxes or mixture of both, while a contractionary fiscal policy (to stimulate aggregate demand) would take the form of a reduction in government expenditures or an increase in taxes or a mixture of both.

**Monetary Policy**

Monetary policy are measures designed to regulate and control the volume, cost, availability, and direction of money and credit in an economy in order to influence the level of income, employment, general price level, aggregate demand and balance of payments. Monetary policy involves the change in money supply or interest rates to influence the level of income, employment, general price level, aggregate demand and balance of payments. Money supply and interest rates are the major monetary policy instruments. In changing money supply and interest rates monetary authority employ the following policies: open market operation, monetary policy rate, minimum reserve requirements, stipulation of liquidity ratios, and sectoral credit guidelines. The above five is known as quantitative or general or indirect monetary policy instruments while sectoral credit guidelines is known as qualitative or selective or direct instrument.

**Macroeconomic Stabilization Problems**

Macroeconomic stabilization faces two major problems, viz, conflicts in objectives and, information and timing.

**Conflicts in Objectives**

One of the major problems of macroeconomic stabilization is incompatibility of objectives. This is revealed in the conflict between full employment and price stability, full employment and balance of payments, and price stability and balance of payments. The attainment of one of the goals makes it more difficult for policy makers to attain the others. We consider a few hypothetical situations below:

- **Full Employment and Price Stability**: policy makers face a trade-off in trying to reduce unemployment and inflation simultaneously. This trade-off is evident in Philip curve. The curve reveals that as an economy approaches full employment of resources, the pool of unemployed shrinks while increase in aggregate demand will boost businesses attempt to produce more in order to satisfy the additional demand. In attempting to produce more, businesses will draw from their competitors' payroll by offering more attractive wages and benefits. In all, as the cost of production rises, prices rise, hence Inflation appears.

- **Full Employment and Balance of Payments**: Full employment always leads to balance of payments deficit. If government decides to increase its expenditure in order to achieve full employment, it will increase import demand thereby creating disequilibrium in the balance of payment

- **Price Stability and Balance of Payments**: As a country pursues price stability, home country’s exports become relatively cheaper to trading partners and imports become expensive. As imports fall and exports rise, a country’s balance of payments improves to a surplus. Also, as a country’s prices become unstable relative to its trading partners, home exports become more expensive to trading partners and imports become cheaper. As Imports rise and exports fall, a country’s balance of payments deteriorates to a deficit.

In order to overcome these conflicts and achieve these goals simultaneously, economists are of the view that the number of instruments must be at least as goals. If there are more goals than policy instruments; it shows that there are not enough instruments to the policy goals and vice versa. Hence, the number of policy instruments must equal the number policy goals for macroeconomic policy to be achievable. However, to achieve given goals with the same number of instruments the problem of assignment of instruments to specific goal arises. The resolution to the problem as postulated by Mundell (1962) requires the pairing of fiscal policy with internal balance and monetary policy with external balance for successful economic policies.
Information and Timing: It is difficult for government to implement policies or programmes due to lack of sufficient information about the economic problem it is expected to redress. If the information about a problem is inadequate, it may lead to the application of inappropriate remedial measure which may exacerbate rather than resolve the problem. Similarly, inappropriate timing of the solution is another challenge. A solution may be implemented long after the problem is virtually over.

Stabilization Policy Instruments and Their Application

To achieve a given number of macroeconomic goals, the same number of policy instruments is required. Each policy instrument needs to be paired with targeted goal on which it is most effective. According to Obadan (2012), policy instruments that are available to a nation to achieve its macroeconomic goals are summarized as follows:

- Expenditure-changing or demand instruments (policies): This involves the combination of fiscal (changes in government expenditure and/or taxes) and monetary policy (changes in money supply and/or interest rates) instruments.
- Expenditure-Switching Instruments (policies): This involves exchange rate policy (devaluation and revaluation, and exchange controls), commercial policy (import duties and export subsidies) etc.
- Direct Controls or Interference with the operation of the market forces: This involves income policy (price and controls).

Our focus is on expenditure-changing instruments (policies), since fiscal and monetary policy are supplemented with other instruments, especially in developing countries of Africa (Iyoha, 2002).

Expenditure –Changing policies and Internal Balance

Table 1 shows the implications of internal and external imbalances in a country that is focused on improving internal policy variables using expenditure-changing policies fiscal and monetary policies available to policy makers.

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Cases of Internal and External Conditions</th>
<th>Policy for Internal Balance</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Recession with BoP deficit</td>
<td>Expansionary</td>
<td>External Balance worsens</td>
</tr>
<tr>
<td>2</td>
<td>Recession with BoP surplus</td>
<td>Expansionary</td>
<td>External Balance improves</td>
</tr>
<tr>
<td>3</td>
<td>Inflation with BoP surplus</td>
<td>Restrictive</td>
<td>External Balance worsens</td>
</tr>
<tr>
<td>4</td>
<td>Inflation with BoP deficit</td>
<td>Restrictive</td>
<td>External Balance improves</td>
</tr>
</tbody>
</table>

Source: Adapted from Obadan(2012).

The implications:

**Scenario 1:** Here the economy is faced with recession accompanied with BoP deficit. To eliminate recession, policy makers can employ expenditure increasing (expansionary fiscal and monetary) policy. Expansionary fiscal policy (increase in government expenditure and/or reduction in taxes) leads to increase in income (to eliminate recession); the expansion in income induces a rise in imports and the decrease in interest rates may bring about short term capital outflow. These policies will increase the BoP deficit.

**Scenario 2:** Here a recession is accompanied with BoP surplus. Expansionary fiscal policy (increase in government expenditure and/or reduction in taxes) leads to increase in income (to eliminate recession); the expansion in income induces a rise in imports and the decrease in interest rates may bring about short term capital outflow. Both policies will reduce the BoP surplus.

**Scenario 3:** Here an inflationary pressure is accompanied with BoP surplus. To eliminate inflationary pressure, policy makers can employ expenditure reducing (restrictive fiscal and monetary) policy. Restrictive fiscal policy (decrease in government expenditure and/or increase in taxes) leads to fall in
aggregate demand (to eliminate inflationary pressure); the reduction in aggregate demand induces a fall in imports and the increase in interest rates may bring about short term capital inflow. Both policies will lead to original BoP becoming larger and hence external imbalance. To curb inflation, restrictive policy is required while expansionary policy is required for external balance.

**Scenario 4:** An inflationary pressure is followed with BoP deficit. To eliminate inflationary pressure, policy makers can employ expenditure reducing (restrictive fiscal and monetary) policy. Restrictive fiscal policy (decrease in government expenditure and/or increase in taxes) leads to fall in aggregate demand (to eliminate inflationary pressure); the reduction in aggregate demand induces a fall in imports and stimulating exports. The increase in interest rates may bring about short term capital inflow. Both policies will reduce BoP deficit or BoP turn into surplus.

From the application of the policy instruments, it is observed that scenarios 1 and 3 show conflict between internal and external balance in the use of fiscal and monetary policies. But in scenarios 2 and 4 there is no conflict. That is, the use of the fiscal and monetary policies (policy instruments) to achieve internal balance will improve external balance. However, the efficacy of the policy instruments to restore external balance depends on: the marginal propensity to import, responsiveness of prices to decreasing aggregate demand, price elasticity of demand for import and responsiveness of capital flows to changes in domestic interest rates (Obadan, 2012).

In resolving the policy instruments assignment problem, Mundell (1962) suggested that policy instruments should be paired with policy goals on which they have the greatest relative impact. Mundell posited that fiscal policy should be used for promoting internal balance while monetary policy should be used for achieving external balance. In other words, different combinations (optimal mix) of fiscal and monetary policies are required to maintain both internal and external balance. Table 2 summaries the optimal policy mix that is required to achieve both internal and external balance simultaneously.

**Table 2: Policy Requirements (Optimal mix) Under Different Internal and External Conditions**

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Internal Condition (prices, employment and income)</th>
<th>Policy Requirement</th>
<th>External Condition (trade and/or capital flows)</th>
<th>Policy Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Inflation</td>
<td>Restraint</td>
<td>Deficit</td>
<td>Restraint</td>
</tr>
<tr>
<td>2</td>
<td>Recession</td>
<td>Expansion</td>
<td>Surplus</td>
<td>Expansion</td>
</tr>
<tr>
<td>3</td>
<td>Inflation</td>
<td>Restraint</td>
<td>Surplus</td>
<td>Expansion</td>
</tr>
<tr>
<td>4</td>
<td>Recession</td>
<td>Expansion</td>
<td>Deficit</td>
<td>Restraint</td>
</tr>
<tr>
<td>5</td>
<td>Balance</td>
<td>Neutrality</td>
<td>Deficit</td>
<td>Restraint</td>
</tr>
<tr>
<td>6</td>
<td>Balance</td>
<td>Neutrality</td>
<td>Surplus</td>
<td>Expansion</td>
</tr>
<tr>
<td>7</td>
<td>Inflation</td>
<td>Restraint</td>
<td>Balance</td>
<td>Neutrality</td>
</tr>
<tr>
<td>8</td>
<td>Recession</td>
<td>Expansion</td>
<td>Balance</td>
<td>Neutrality</td>
</tr>
<tr>
<td>9</td>
<td>Balance</td>
<td>Neutrality</td>
<td>Balance</td>
<td>Neutrality</td>
</tr>
</tbody>
</table>

*Source:* Adapted from Obadan (2012).

Scenarios 1-4 have been explained above, hence scenarios 5-9 are explained below.

Scenarios 5-9: In scenario 5, internal balance has been achieved while there is external imbalance. To correct the external imbalance, restrictive policy is required. A restrictive policy depresses aggregate demand, fall in aggregate demand discourages imports and stimulates exports, it improves external balance. In scenario 6, internal balance is achieved while there is external imbalance. To redress the imbalance, an expansionary policy will diminish the surplus through capital outflows and restored external balance. In scenario 7, there is internal imbalance while external balance is achieved. To correct the imbalance, a restrictive policy will depress aggregate demand and internal balance restored. Also, in scenario 8, there is internal imbalance while external balance is achieved. To redress the imbalance, an expansionary policy will stimulate aggregate demand through increase in consumption and national income. Scenario 9 shows internal and external balance stability.

Challenges of redressing internal and external balance with fiscal and monetary policies.

According to Obadan (2012), they include the following:
Short-term international capital movements may not respond to changes in interest rates or there responsiveness may be erratic. The Peculiar nature of some economies tends to render this policy inapplicable.

- Lack of exact knowledge about the precise effect of fiscal and monetary policy.
- Time lags between the decision to adopt a policy and its operation complicates issues.
- Economists differ in terms of definition of monetary policy. Some define monetary policy in terms of changes in money supply rather than in interest rates as was used in the analysis above. This has different implications in terms of BoP structure and policy impact.
- Counter offsetting changes in other nations. When there is an offsetting change in policy of other nations as a response to domestic policy changes, it make policy decisions unrealistic.

Conclusion

Macroeconomic stabilization is a condition of preventing excessive expansion or contraction of economic goals. In order words, Macroeconomic stabilization involves slowing down economic goals during a boom and stimulating it during recession, hence, it is often referred to as counter cyclical measure. Macroeconomic goals include: full employment, price stability, economic growth and balance of payments equilibrium. For easy management, these goals are classified into two broad goals, namely; internal balance and external balance. The former (domestic macroeconomic stability) comprises of full employment, economic growth and price stability while the later (external stability) entails balance of payments equilibrium. The achievement of both balances increases national welfare. However, the pursuit of the goals conflict with each other, e.g., full employment and price stability. In such situation, trade-off exists between some of the goals. Whenever a conflict arises, internal balance always takes precedence over external balance. Internal and external imbalances manifest in different forms such as: recession, inflation, BoP deficit, BoP surplus or combination of both internal and external imbalances respectively. These imbalances require different policy instruments. In the pursuit of two macroeconomic goals, a minimum of two policy instruments are usually required to achieve both goals.

Macroeconomic policy focuses on how to regulate the economy. It involves deliberate actions directed at influencing the levels of employment, price, output, income, exchange rate and balance of payment using macroeconomic policy instruments. Macroeconomic policy instruments are fiscal policy, monetary policy, trade policy, Exchange rate policy, Income policy, and Debt management policy. These policy instruments are summarized into three, namely; expenditure-changing policies (refer to fiscal and monetary policy) instruments; expenditure-switching and direct control instruments (policies). However, expenditure-changing was analyzed since other policy instruments supplement expenditure-changing policies (fiscal and monetary policies).

Macroeconomic goals (internal and external goals) can be achieved using expenditure-changing policy instruments (fiscal and monetary policy). Fiscal policy for internal balance while monetary policy for promoting external balance. Four combinations of internal and external balances can be identified and policy requirements are as follows:

- Recession accompanied with deficit: Policy requirements are expansionary fiscal policy for internal balance and restrictive monetary policy for external balance.
- Recession accompanied with surplus: Policy requirements are expansionary fiscal policy for internal balance and easy monetary policy for external balance.
- Inflation with surplus: Policy requirements are restrictive fiscal policy for internal balance and easy monetary policy for external balance.
- Inflation with deficit: Policy requirements are restrictive fiscal policy for internal balance and restrictive monetary policy for external balance.
References


MACROECONOMIC GOALS, AmosWEB Encycloonomic WEB*pedia.


