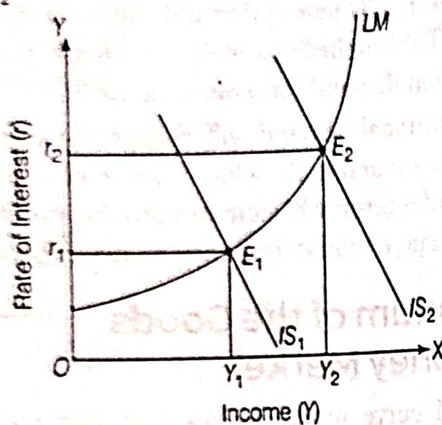
Change in Normal Equilibrium

Let us first consider what will happen if the demand of money is increased in the economy by the consumers and investors. It means rise in the demand of goods and services in the market and thereby, it causes an outward shift in IS_1 curve, where increase in demand of goods and services leads to the shift in IS curve from IS_1 to IS_2.

It will be seen from diagram below that with the LM curve remaining unchanged, the new IS_2 curve intersects LM curve at point E_2. Thus, in IS-LM model, the equilibrium moves from point E_1 (initial) to E_2 (New) and with this, the rate of interest rises from Or_1 to Or_2 and income level from OY_1 to OY_2.



Monetary Policy

Monetary policy is an important instrument with which the objectives of macro economic policy can be achieved. It is the central bank of a country, who formulates and implements the monetary policy in a country. In India, the Reserve Bank is the central bank of India, who works on behalf of the government and acts according to its directions and broad guidelines.

Monetary policy is a policy which employ's apex bank's control over the supply, cost and use of money as an instrument for achieving certain given goals of economic policy.

Since, the common goals of economic policy are the attainment of full employment, price stability, balance of payments, equilibrium and rapid economic growth, the effectiveness of monetary policy depends upon the degree to which it succeeds in achieving these objectives. The Central Bank influences the total amount and the cost of credit primarily by affecting the cash reserves of the commercial banks in economy.

Objectives of Monetary Policy

It has often been asserted by Governors of Reserve Bank of India that "Growth with price stability is the goal of monetary policy of the Reserve Bank of India".

Important goals or objectives of the monetary policy

- To ensure economic stability at full employment or potential level of output.
- To achieve price stability by controlling inflation and deflation.
- To promote and encourage economic growth in the economy.

Tools of Monetary Policy

General/Quantitative Methods

These methods control the total quantity of credit or money supply in the economy

- **Open Market Operations** Buying/selling of government securities in the open market to balance money supply in the economy.
- **Cash Reserve Ratio** (CRR) It is the ratio of a bank's time and demand liabilities to be kept in reserve with the RBI. RBI is authorised to vary CRR between 3% and 15%. It is an effective way to influence money supply in the economy.
- **Statutory Liquidity Ratio** (SLR) Commercial banks have to invest certain percentage of its time and demand liabilities in government approved securities. The reduction in SLR enhances the liquidity of commercial banks.
- **Liquidity Adjustment Facility** (LAF) It consists of daily infusion or absorption of liquidity on a repurchase basis, through repo (liquidity injection) and reverse repo (liquidity absorption) auction operations, *using government securities as collateral.*
  (a) **Repo Rate** It is the rate at which the RBI, lends short-term money to the banks against securities, when the repo rate increases, borrowings from RBI becomes more expensive.
  (b) **Reverse Repo rate** It is the rate at which RBI borrowr from commercial banks.

Selective/Qualitative Measures

- Ceiling on Credit
- Margin Requirements
- Discriminatory Rates of Interest

Roles of Monetary Policy

Monetary policy play multifaceted role in achieving macro economic policies.

Some of the roles of monetary policy are as follows

Expansionary Monetary Policy to Cure Deflation

The following three monetary policy measures are adopted as a part of an expansionary monetary policy to cure deflation or recession and to establish the equilibrium of national income at full employment level of output

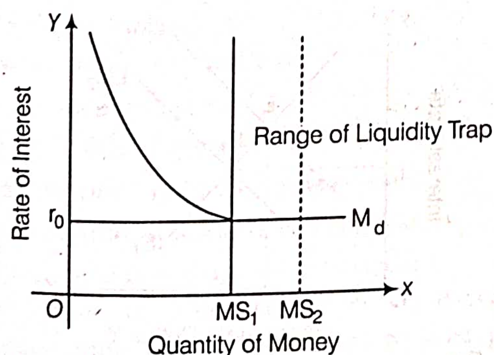
- The Central Bank undertakes open market operations and buys securities by the Central Bank, from the public, chiefly from commercial banks, which lead to the increase in reserves of the banks or amount of currency with the general public.
- The Central Bank may lower the bank rate or what is also called discount rate, the rate of interest charged by the Central Bank of a country on its loan to commercial banks.

  At a lower bank rate, the commercial banks will be induced to borrow more from the Central Bank and will be able to issue more credit at the lower rate of interest to businessman and investors.
- The Central Bank may reduce the Cash Reserve Ratio CRR and the SLR to be kept by the commercial banks. In the developing countries like India, this is a more effective and direct way of expanding credit and increasing money supply in the economy by the Central Bank.

  With lower reserve requirements, a large amount of funds is released for providing loan to businessman and investors. Consequently, credit expands and investment increases in the economy which has an expansionary effect on output and employment.

Liquidity Trap

During depression, current rates of interest may fall so low that most of the people expect the interest rate to rise in future and therefore, they hold onto their money for the present. This makes the demand for money absolutely elastic at a low rate of interest as shown in the figure.



Liquidity Trap and Increase in Money Supply Panel (a)

Under these circumstances, the economy is said to have fallen in a liquidity trap. A liquidity trap occurs when under conditions of depression, the economy finds itself in a situation, where people hold all the increments in the stock of money so that demand for money becomes absolutely elastic and therefore, money demand curve M_d takes a horizontal shape.

Monetary Policy to Control Inflation

The following monetary measures which constitute tight money policy are generally adopted into control inflation

- The Central Bank sells the government securities to the banks, other depository institutions and general public through open market operations. This action will reduce the reserves with the banks and liquid funds with the general public. With less reserves with the banks, their lending capacity will be reduced. Hence, the money supply in the economy will shrink.
- The bank rate may also be raised, which will discourage the banks to take loans from the Central Banks. This will tend to reduce their liquidity and also induce them to raise their own lending rates. Thus, this will reduce the availability of credit and also raise its cost.
- The most important anti-inflationary measures is the raising of Statutory Ratio or Cash Reserve Ratio (CRR). To meet the new higher reserve requirements, banks will reduce their lendings. This will have a direct effect on the contraction of money supply in the economy and help in controlling demand pull inflation.

Fiscal Policy

Fiscal policy deals with the taxation and expenditure decisions of the government. These include, tax policy, expenditure policy, investment or disinvestment strategies and debt and surplus management.

During the 1930s, when a severe depression took place in the western capitalist economies and also the evidence of post World War II period imply that there was no automatic mechanism which works to bring about stability in the economy.

Thus, Keynes argued for intervention by the Government to cure depression and inflation by adopting appropriate tools of macro economic policy.

According to **Keynes**, monetary policy was ineffective to lift the economy out of depression. He emphasised the role of fiscal policy as an effective tool of stablising the economy.

However, in view of the modern economists both fiscal and monetary policies play a useful role in stablising the economy.

Difference between Monetary Policy and Fiscal Policy

- The fiscal policy decisions are set by the Central Government, whereas monetary policy is being implemented by the Central Bank, *i.e.* the RBI.
- Fiscal policy deals in government spending and revenue collection by way of tax, whereas monetary policy is a process which controls the demand and supply of money.
- Fiscal policy relates to economic position of a nation, whereas monetary policy focuses on the strategy of banks.

Measures/Tools of Fiscal Policy

- **Public Revenue/Income** Under the theory of public revenue, we study alternative sources of state income. It discusses and analyses comparative advantages and disadvantages of various forms of revenue and principles which should govern the choice between them.
- **Public Expenditure** Under the theory of public expenditure, we deal with various principles, on the basis of which the direction of government expenditure is governed. Theory of public expenditure is a major tool for implementing welfare, growth stabilisation and other policies of the government.
- **Public Debt** Theory of public debt deals with all the loans and other liabilities of the government and all the principles related with debt.
- **Financial Administration** All financial activities involving issues of financial administration include public budget, its passing, auditing and similar other matters.
- **Economic Stability/Budgetary Policy** Under the theory of economic stability, we study various policies and principles of finance to bring economic stability in the country. Fiscal policy of the government is studied under the theory of economic stability.

  Budget comes under this policy. The budget is an extensive account of the government's finances, in which revenues from all sources and expenses of all activities undertaken are aggregate.

Discretionary and Non-discretionary Fiscal Policy for Stabilisation

Fiscal policy is of two types, namely, discretionary fiscal policy and non-discretionary fiscal policy. By discretionary policy, we mean deliberate change in the government expenditure and taxes to influence the level of national output and prices. Discretionary fiscal policy generally aims at managing aggregate demand for goods and services.

On the other hand, non-discretionary fiscal policy of automatic stabilisers is a built in tax or expenditure mechanism that increases aggregate demand, when recession occurs and reduces aggregate demand, *when there* is inflation in the economy, without any special deliberate actions on the part of the government. Thus, non-discretionary fiscal policy is mainly a policy of demand management.

Contra-Cyclical Fiscal Policy

A fiscal policy as an instrument of economic stability, has to be contra-cyclical in its behaviour. By spending more than its current income, the government can contribute to raise the employment, income and economic activity, otherwise, it will exert a contractionary effect on employment, income and economic activity by collecting more revenue from the people in the form of taxes than it spends. So, the government should carefully regulate both the time and size of its spending and tax-revenue operations.

Changes in Monetary and Fiscal Policy

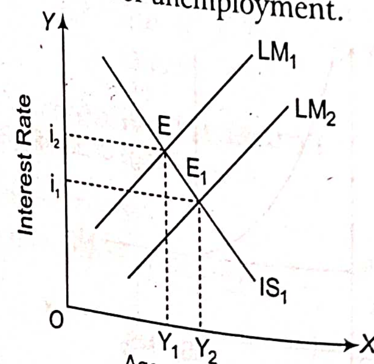
The changes in monetary and fiscal policy are intended to restore equilibrium in the economy. Their working is discussed below.

Response to a Change in Monetary Policy

The figure below describes the response of change in output and interest rate to an increase in the money supply. In the beginning, the economy is in equilibrium for both the goods market and the market for money at point E, *i.e.* the intersection of IS_1 and LM_1.

Suppose at the resulting level of aggregate output Y_1, the economy is suffering from an unemployment rate of 10% and the Reserve Bank of India decides, it should try to raise output and reduce unemployment by raising the money supply.

The increase in money supply causes the LM curve to shift rightward to LM_2 and the equilibrium point for both the goods market and the market for money moves to point E_1 (intersection of IS_1 and LM_2). As a result of an increase in the money supply, the interest declines to i and aggregate output rises to Y_2. The RBI's policy has been successful in addressing the problem of unemployment.



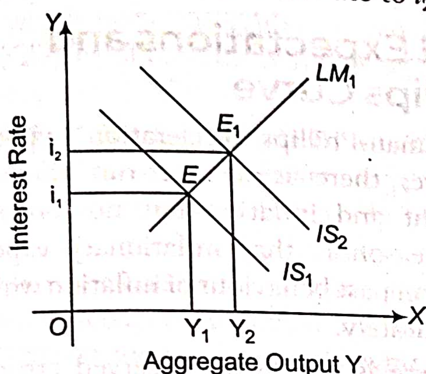
Response of aggregate output and Interest rate to an increase in ...

Response to a Change in Fiscal Policy

Assume that the Reserve Bank of India is not willing to increase the money supply, when the economy is suffering from a 10% unemployment rate.

The IS-LM model reveals that figure depicts the response of output and the interest rate to an expansionary fiscal policy (increase in government spending or decrease in taxes). An increase in government spending or a decrease in taxes causes the IS_1 curve to shift to IS_2 and the equilibrium for both the goods market and the market for money moves to point E_1 (intersection of IS_2 with LM_1).

The result of the change in fiscal policy is a rise in aggregate output to Y_2 and a rise in the interest rate to i_2.



Response of Aggregate Output and the Interest Rate to an Expansionary Fiscal Policy

The resulting increase in aggregate demand causes aggregate output to rise. The higher level of aggregate output raises the quantity of money demanded, creating an excess demand for money, which inturn causes the interest rate to rise.

Change in the Value of Money

The change in the value of money can take the following forms

Inflation

It is defined as a sustained increase in the general level of prices for goods and services. It is measured as an annual percentage increase. Inflation is the percentage change in the value of the Wholesale Price Index (WPI) or, a year basis.

Causes of inflation in India are

- Increase in public expenditure
- Deficit financing
- Erratic agricultural growth
- Agricultural price policy of government
- Upward revision of administered price
- Inadequate rise in industrial production

The main causes or inflation are either excess aggregate demand (economic growth too fast) or cost push factors (supply side factors).

Reflation

A fiscal or monetary policy, designed to expand a country's output and curb the effects of deflation. Reflation policies can include reducing taxes, changing the money supply and lowering interest rates.

The term 'reflation' is also used to describe the first phase of economic recovery after a period of contraction. It is an attempt to bring back inflation in an economy, which is in deflation so as to induce growth.

Stagflation

When you have a slow economy with high inflation and unemployment rates, then stagflation is usually the result. When the economy does not grow and prices continue to rise, you have a stagflation cycle in the economy.

Disinflation

This is a reduction in the rate of inflation over time, even though inflation itself may be positive.

Deflation

A general decline in prices, often caused by a reduction in the supply of money or credit. Deflation can be also caused by a decrease in government, personal or investment spending. The opposite of inflation, deflation has the side effect of increased unemployment, since, there is a lower level of demand in the economy, which can lead to an economic depression.

Phillips Curve Analysis

The Phillips curve represents a stable relation between inflation and unemployment overtime, which provided a menu of policy choices for the policy makers. An economy could choose whether to have a combination of relatively low unemployment and relatively high inflation or combination of relatively high unemployment and relatively low inflation.

AW Phillips in 1958, published the findings of th empirical work on the relationship between the average ra of unemployment and the average rate of change of nomi wages in the business cycle. Phillips interest was in test the hypothesis that, lower the rate of unemployment, more rapidly firms would have to increase wages in orde attract new worker and retain existing ones.

Working of the Phillips Curve

As we know that the wage costs constitute the backbo the price structure, in recent decades economists sh interests in the study of supply analysis and focuse