

### **Introduction to Economics**

The English term '**Economics**' is derived from the Greek word 'Oikonomia'. Its meaning is 'household management'. **Economics** was first read in ancient Greece. Aristotle, the Greek Philosopher termed **Economics** as a science of 'household management'.

Economics can be confusing and finding a clear definition of economics can be a challenge. Most simply put, economics is the analysis of how people use the resources that are available to them.

According to the American Economic Association, those resources include the time and talent people have available, the land, buildings, equipment and other tools on hand and the knowledge of how to combine them to create products and services

### **Definition of Economics**

Economics has been defined by several groups of economists. The following are the classification of various definitions:

#### **1. Wealth definition by Adam Smith or Classical Economists**

Adam Smith is a Scotland economist. He published a book named "**An inquiry into the nature and causes of the wealth of nation**" in 1776. Later he published another book "Wealth of the nation" which became popular among people. After publication of this book economics got its independence identify. That's why Adam Smith is known as Father of economics.

*He has defined economics as the science of the wealth in his book .According to him," Prosperity of the individuals constitute the prosperity of the nation. Gain of wealth or after acquiring the man can achieve his satisfaction"*

Therefore, Economics is a science which deals with wealth. Economics provides the guide lines to the individuals and society or nation. Several great economists such as J.B.Say, David Ricardo, J.S. Mill etc. supported and followed Adam Smith definition. So, they are called classical economists.

#### **2. Welfare definition by Alfred Marshall or Neo-classical Economists**

Alfred Marshall, a pioneer neoclassical economist, reoriented Economics towards the study of mankind and provided economic science with a more comprehensive definition. Marshall, in his famous book 'Principle of Economics' published in 1890, defines economics as follows:

"Political Economy or Economics is a study of mankind in the ordinary business of life. It examines that part of individual & social action which is most closely connected with the attainment & with the use of material requisites of well-being".

This definition clearly states that Economics is on the one side a study of wealth and on the other and more important side “a part of the study of man”. Marshall’s followers like Pigou, Cannon and Baveridge have also defined Economics in terms of material welfare.

### **3. Scarcity definition by Lionel Robbins**

After criticizing definition of economics by Alfred Marshall, Lionel Robbins (22 November 1898 - 15 May 1984) a British economist gave his own definition of economics in his book “An Essay on the Nature and Significance of Economic Science” published in 1932. Lionel Robbins has given scarcity definition of economics in these words, “Economics is a Science that studies human behavior as a relationship between **limited resources and unlimited wants** which have **alternative uses**”.

Lionel Robbins claimed that his definition did not suffer from any of these defects. Lionel Robbins definition was analytical rather than classificatory. Instead of discussing a certain type of human behavior, it focused its attention on a particular aspect of human behavior that is behavior concerned with the **scarcity of resources** and unlimited wants.

#### **Major Points of Lionel Robbins Definition of Economics**

Following are the points:

- 1.Ends (Unlimited Wants)
- 2.Means (Scarce Resource)
- 3.Alternative Uses

### **4. Growth-oriented/Modern definition by Paul A. Samuelson**

Samuelson’s definition is known as a modern definition of economics. It is a combination of wealth,welfare and scarcity definitions. This talks about sustainable development and “inter-generational equality”. It includes choice making in the present and in the future. Although the fundamental economic problem of scarcity remains undisputed, Samuelson goes a step further and discusses how a society uses limited resources for producing goods and services for present and future consumption of various people or groups.

This definition takes into account, production, consumption, exchange, and distribution of goods. Hence, this definition is most satisfactory and acceptable. It has a universal appeal.

### **Macroeconomics**

In 1936, well-known British economist J. M. Keynes introduced his own theory and wrote his famous book *The General Theory of Employment, Interest and Money*, which birthed the Keynesian revolution, the second primary school of economic thought. Keynes criticised the Classical assumption of full employment and developed modern macroeconomics: economic theory that attempts to connect money supply, employment, business cycles, and government policy.

The incentive for development of modern macroeconomics came from the Great Depression of the early 1930s. Macroeconomics addresses

- the desire to control business cycles in advancing economies and
- the need to develop backward economies.

### **Meaning:**

The word macro is derived from the Greek word ‘**makros**’ meaning ‘**large**’ and, therefore, macroeconomics is the study and analysis of an economy as a whole.

*Macroeconomics is the study of aggregates or averages covering the entire economy, such as total employment, national income, national output, total investment, total consumption, total savings, aggregate supply, aggregate demand, and general price level, wage level, and cost structure.*

### **Definition**

Thus, Professor Boulding says, “Macroeconomics deals not with individual quantities as such but with the aggregates of these quantities; not with individual incomes but with the national income; not with individual prices but with the price level; not with individual outputs but with the national output.”

### **The Importance of Macroeconomics**

1. It helps us understand the functioning of a complicated modern economic system. It describes how the economy as a whole functions and how the level of national income and employment is determined on the basis of aggregate demand and aggregate supply.

2. It helps to achieve the goal of economic growth, a higher GDP level, and higher level of employment. It analyses the forces which determine economic growth of a country and explains how to reach the highest state of economic growth and sustain it.
3. It helps to bring stability in price level and analyses fluctuations in business activities. It suggests policy measures to control inflation and deflation.
4. It explains factors which determine balance of payments. At the same time, it identifies causes of deficit in balance of payments and suggests remedial measures.
5. It helps to solve economic problems like poverty, unemployment, inflation, deflation etc., whose solution is possible at macro level only (in other words, at the level of the whole economy).
6. With a detailed knowledge of the functioning of an economy at macro level, it has been possible to formulate correct economic policies and also coordinate international economic policies.
7. Last but not least, macroeconomic theory has saved us from the dangers of application of microeconomic theory to the problems that require us to look at the economy as a whole.

### **Key Differences between Micro and Macro Economics**

The points given below explain the difference between micro and macro economics in detail:

1. Microeconomics **studies the particular market segment** of the economy, whereas Macroeconomics **studies the whole economy**, that covers several market segments.
2. Micro economics **stresses on individual economic units**. As against this, the focus of macro economics is on **aggregate economic variables**.
3. While microeconomics is applied to operational or **internal issues**, environmental and **external issues** are the concern of macro economics.
4. Microeconomics **deals with an individual product, firm, household, industry, wages, prices, etc.**, while Macroeconomics **deals with aggregates like national income, national output, price level, etc.**
5. Microeconomics covers issues like how the price of a particular commodity will affect its quantity demanded and quantity supplied and vice versa while Macroeconomics covers major issues of an economy like unemployment, monetary/ fiscal policies, poverty, international trade, etc.
6. While analysing any economy, micro economics takes a **bottom-up approach**, whereas the macroeconomics takes a **top-down approach** into consideration.

### ECONOMIC SYSTEMS

*Economic systems are the means by which countries and governments distribute resources and trade goods and services. They are used to control the five factors of production, including: labor, capital, entrepreneurs, physical resources and information resources.*

#### Free Market Economic System

*The free market means that economic decisions are taken by private individuals and firms. Everything is owned and operated by private individuals. In a pure free market there would be no government intervention in the economy.*

However, in practise governments usually involve themselves in the implementation of certain laws and certain public services, even if only national defence and the protection of private property.. We often speak about America having a free market economy because most businesses are left to private enterprise. But, even in America the government spends about 35% of GDP.

#### Benefits of a free market

1. Firms have incentives to be efficient and provide goods and services demanded by consumers
2. It avoids the bureaucracy often involved in government intervention.
3. The profit motive provides an incentive to cut costs and make efficient use of scarce resources
4. Economic freedom is important for personal freedom.

#### Mixed Economy

A mixed economy is a system that combines characteristics of market and command economy. **A mixed economy means that part of the economy is left to the free market, and part of it is run by the government.** In reality most economies are mixed, with varying degrees of state intervention.

Mixed economies start from the basis of allowing private enterprise to run most business. Then the governments intervene in certain areas of the economy, such as regulation, and spending money on public services.

#### Advantages of Mixed Economy

##### 1. It promotes a quick economic development.

In this type of economic system, both the public and private sectors can operate equally, which means that economic development will be quicker. This is especially true considering that economic resources will be utilized efficiently. Also, depletion of resources will be slowed down.

### **2. It creates a balance in regional developments.**

The planning commission of a country will be able to create policies for the improvement of every region. In addition, the government would also try to develop each sector of the population.

### **3. It encourages lesser income inequality.**

With a mixed economy, there will be lesser inequality when it comes to income, where the inheritance law is applied to enable members of society to become richer. As for the public sector, it would try to provide economic utility to the general public, leading to further reduction of inequality in income.

### **4. It provides the freedom to own a private property.**

People are free to obtain property in a mixed economy, which means that the idea to work even more will be encouraged. Again, this will help in the fast economic development, especially in the areas of industries and agriculture.

## **Command Economy**

*A command or planned economy occurs when the government controls all major aspects of the economy and economic production. In a command economy, it is the government that decides what to produce, how to produce goods and how to distribute goods and services within the economy.* Command economies were often associated with the political system of Communism. It was Karl Marx, in the Communist manifesto who argued for ‘common ownership of the means of production’

### **1. Government ownership of the means of production.**

In command economies, governments will own some or all of the industries producing goods and services.

### **2. Government pricing and production decisions.**

In a command economy, production is decided by government agencies, who decide the most socially efficient goods to produce. Government agencies may also set prices or give consumers rations directly.

### **3. Government macro-economic objectives.**

In a command economy, the government will have over-riding macro economic objectives such as employment rates and what to produce.

## **NATIONAL INCOME**

National Income refers to *the money value of all the goods and services produced in a country during a financial year*. In other words, the final outcome of all the economic activities of the nation during a period of one year, valued in terms of money is called as a National income.

In the above definition, the economic activities include all the human activities that produce goods and services that can be valued at market price. Such as production by farmers, production by firms in different industrial sectors, production of goods and services by government, services produced by business intermediaries Viz. Wholesalers and retailers, banks and other financial institutions, educational institutes and professionals like doctors, teachers, lawyers, etc.

### **National Income Concepts**

1. Gross Domestic Product (GDP)
2. Gross National Product (GNP)
3. Net National Product (NNP)
4. Net Domestic Product (NDP)
5. Personal Income

#### **1. Gross National Product (GNP)**

“The aggregate money value of all final goods and services produced in a country during a year.”  
The final goods & Services stands for finished goods & Services which are ready for consumption. Eg: Food, clothes, houses, Vehicles, electrical goods, Medicine etc.,

$$\text{GNP} = \text{NNP} + \text{Depreciation charges} + \text{Net foreign Earnings}$$

$$\text{GNP} = \text{NNP} + \text{DC} + (\text{X}-\text{M})$$

Net factor income from abroad = factor income received by Indian nationals from abroad – factor income paid to foreign nationals working in India.

#### **2. Net National Product (NNP)**

The “net money value of all final goods and services produced in a country during a year is called Net National Product.”

$$\text{NNP} = \text{GNP} - \text{Depreciation Cost (DC)}$$

Depreciation is the consumption of fixed capital or fall in the value of fixed capital due to wear and tear.

### **3. Gross Domestic Product (GDP)**

Gross Domestic Product refers to “ the money value of all final goods and services produced with in the country during a year.”

$$\text{GDP} = \text{GNP} - \text{Foreign Earnings}$$

### **4. Net Domestic Product (NDP)**

Net Domestic Product refers to “ the net money value of all final goods and services produced with in the country during a year.”

$$\text{NNP} = \text{GDP} - \text{Depreciation Cost}$$

### **5. Personal Income:**

Personal income is the sum of all incomes actually received by all individuals or households during a given year. In National Income there are some income, which is earned but not actually received by households such as Social Security contributions, corporate income taxes and undistributed profits. On the other hand there are income (transfer payment), which is received but not currently earned such as old age pensions, unemployment doles, relief payments, etc. Thus, in moving from national income to personal income we must subtract the incomes earned but not received and add incomes received but not currently earned. Therefore,

Personal Income = National Income – Social Security contributions – corporate income taxes – undistributed corporate profits + transfer payments.

**Disposable Income:** From personal income if we deduct personal taxes like income taxes, personal property taxes etc. what remains is called disposable income. Thus,

$$\text{Disposable Income} = \text{Personal income} - \text{personal taxes.}$$

Disposable Income can either be consumed or saved. Therefore,

$$\text{Disposable Income} = \text{consumption} + \text{saving.}$$

### **Percapita income**

The average annual income of an individual is called percapita income. It is the income per head of the population in a country. It is the real indicator of the standard of living of the country.

Thus,

$$\text{PCI} = \frac{\text{National Income}}{\text{Total Population}}$$



## **Estimation of National Income**

### **1. Production Method**

Under this method the aggregate money value of all final goods & services produced in a country during a year will be calculated and totaled up. Out of this the depreciation cost will be deducted and the balance amount will become the National Income.

The following items are included in India in this: agriculture and allied services; mining; manufacturing, construction, electricity, gas and water supply; transport, communication and trade; banking and insurance, real estates and ownership of dwellings and business services; and public administration and defense and other services (or government services).

In other words, it is the sum of gross value added.

### **2. Income Method**

Under this method, the income earned by all factors of production in the form of rent, wages, interest and profit are calculated and totaled up. That aggregate amount becomes the national income. It includes Incomes of all individuals, Institutions and also government.

### **3. Expenditure Method**

According to this method, the total expenditure incurred by the society in a particular year is added together and includes personal consumption expenditure, net domestic investment, government expenditure on goods and services, and net foreign investment. This concept is based on the assumption that national income equals national expenditure.

### **4. Value Added Method**

Another method of measuring national income is the value added by industries. The difference between the value of material outputs and inputs at each stage of production is the value added. If all such differences are added up for all industries in the economy, we arrive at the gross domestic product.

## **Importance of National Income**

1. It gives a clear picture of the economy
2. Contributions of different sectors towards National income can be known.
3. It helps to compare the standard of living of the people of one country with other country
4. It helps to calculate PCI
5. Useful for formulation & implementation of economic plans and policies.
6. Growth rate of countries can be compared.

**Difficulties/Problems in the Measurement of National Income:**

According to **Kuznets**, the measurement of national income is a complicated problem and is best with the following difficulties:

- a. **Non-availability of statistical material:** Some persons like electricians, plumbers, etc., do some job in their spare time and receive income. The state finds it very difficult to know the exact amount received from such services. This income which, should have been added to the national income is not recorded due to {be lack of full information of statistics material.
- b. **The danger of double counting:** While computing the national income, there is always the danger of double or multiple counting. If care is not taken in estimating the income, the cost of the commodity is likely to be counted twice or thrice and national income will be overestimated.
- c. **Non-marketed services:** In estimating the national income, only those services are included for which the payment is made. The unpaid services, or non-marketed services are excluded from the national income.
- d. **Difficulty in assessing the depreciation allowance:** The deduction of depreciation allowances, accidental damages, repair, and replacement charges from the national income is not an easy task. It' requires high degree of judgment to assess the depreciation allowance and other charges.
- e. **Housing:** A person lives in a rented house. He pays \$5000 per month to the landlord. The income of the landlord is recorded in the national income. Let us suppose that the tenant purchases the same house from the landlord. Now the income of the owner occupant has increased by \$5000. Is it not justifiable to include this income in the national income? Should or should not this income be recorded in the national income is still a controversial question.
- f. **Transfer earnings:** While measuring the national income, it should be seen that transfer payments should not become a part of national income. The payments made as relief allowance, pensions, etc. do not contribute towards current production. So they should be excluded from national income.
- g. **Self-consumed production:** In developing countries, a significant part of the output is not exchanged for money in the market. It is either consumed directly by producers or bartered for other goods This unorganized and non-monetized sector makes calculation of national income difficult.
- h. **Price level changes:** National income is measured in money terms. The measuring rod of money itself does not remain stable. This means that national income can change without any change in output.

### **Importance/Issues/Scope of Macro Economics:**

The importance/issues/scope, which are addressed in macro economics are in brief as under:

**1.It helps in understanding the determination of income and employment.** Late **J.M. Keynes** laid great stress on macro economic analysis. He, in his revolutionary book, "General Theory, Employment interest and Money", brought drastic changes in economic thinking. He explained the forces or factors which determine the level of aggregate employment and output in the economy.

**2.Determination of general level of prices.** Macro economic analysis answers questions as to how the general price level is determined and what is the importance of various factors which influence general price level.

**3.Economic growth.** The macro economic models help us to formulate economic policies for achieving long run economic growth with stability. The new developed growth theories explain the causes of poverty in under developed countries and suggest remedies to overcome them.

**4.Macro economics and business cycles.** It is in terms of macro economics that causes of fluctuations in the national income are analyzed. It has also been possible now to formulate policies for controlling business cycles i.e., inflation and deflation.

**5.International trade.** Another important subject of macro economics is to analyze the various aspects of international trade in goods, services and balance of payment problems, the effect of exchange rate on balance of payment etc.

**6.Income shares from the national income. Mr. M. Kalecki and Nicholas Kelder**, by making departure from Ricardo theory, has presented a macro theory of distribution of income. According to these economists, the relative shares of wages and profits depend upon the ratio of investment to national income.

**7.Unemployment.** Another macro economic issue is to explain the causes of unemployment in the economy. **Stagflation** is another important issue of modern economics. The Keynesian and post Keynesian economists are putting lot of efforts in explaining the causes of cyclical unemployment and high unemployment coupled with inflation and suggesting remedies to counteract them.

**8.Macro economic policies.** Fiscal and monetary policies affect the performance of the economy. These two major types of macro economic policies are central in macro economic analysis of the economy.

**9.Global economic system.** In macro economic analysis, it is emphasized that a nation's economy is a part of a global economic system. A good or weak performance of a nation's economy can affect the performance of the world economy as a whole.

**Unit-II**

**Consumption Function:**

As the demand for a good depends upon its price, similarly consumption of a community depends upon the level of income. In other words, consumption is a function of income. The consumption function relates the amount of consumption to the level of income. When the income of a community rises, consumption also rises.

How much consumption rises in response to a given increase in income depends upon the marginal propensity to consume. It should be borne in mind that the consumption function is the whole schedule which describes the amounts of consumption at various levels of income.

**Factors Affecting Consumption Functions:**

According to Keynes, two types of factors influence the consumption function: subjective and objective. The subjective factors are endogenous or internal to the economic system itself. The subjective factors relate to psychological characteristics of human nature, social structure, social institutions and social practices.

The objective factors affecting the consumption function are exogenous, or external to the economy itself. These factors may at times undergo rapid changes. Thus, objective factors may cause a shift in the consumption function.

**Subjective Factors:**

Subjective factors basically underlie and determine the form of the consumption function (i.e., its slope and position).

**The subjective factors concerned are:**

- (1) behaviour patterns fixed by the psychology of human nature
- (2) the institutional arrangements of the modern social order, and social practices relating to the behaviour patterns of business firms with respect to wage and dividend payments and retained earnings, and the institution controlling the distribution of income.

Human behaviour regarding consumption and savings out of increased income depends on psychological motives.

First, there are motives which “lead individuals to refrain from spending out of their incomes.”

**Keynes enlists eight such motives:**

**1. The Motive of Precaution:**

The desire to build up a reserve against unforeseen contingencies.

**2. The Motive of Foresight:**

The desire to provide for anticipated future needs, e.g., in relation to old age, family education, etc.

**3. The Motive of Calculation:**

The desire to enjoy interest and appreciation, because a larger real consumption, at a later date, is preferred to a smaller immediate consumption.

**4. The Motive of Improvement:**

The desire to enjoy a gradually increasing expenditure since it gratifies the common instinct to look forward to a gradually improving standard of life rather than otherwise.

**5. The Motive of Independence:**

The desire to enjoy a sense of independence and the power to do things.

**6. The Motive of Enterprise:**

The desire to secure a mass de manoeuvre to carry on speculation or establish business projects.

**7. The Motive of Pride:**

The desire to possess or to bequeath a fortune.

**8. The Motive of Avarice:**

The desire to satisfy pure miserliness, i.e., unreasonable, but insistent abstinence from expenditure as such.

To this, Keynes adds a corresponding list of motives on consumption such as enjoyment, short-sightedness, generosity, miscalculation, ostentation and extravagance.

Subjective motivations also apply to the behaviour patterns of business corporations and governmental bodies. In this respect, Keynes listed the following motives for accumulation:

**(a) The Motive of Enterprise:**

The desire to do big things, to expand, to secure resources to carry out further capital investment.

**(b) The Motive of Liquidity:**

The desire to face emergencies and difficulties successfully.

**(c) The Motive of Improvement:**

The desire to secure a rising income and to demonstrate successful management.

**(d) The Motive of Financial Prudence:**

The desire to ensure adequate financial provision against depreciation and obsolescence and to discharge debts.

Keynes maintains that the strength of all these motives may vary considerably according to the institution and the organisation of the economic society. Since economic and social institutions and organisations are formed by habits, race, education, morals, present hopes and past experiences, techniques of capital equipment and the prevailing distribution of wealth and established standard of life — all these factors are unlikely to vary in the short run. They, therefore, affect secular

progress only very gradually. In other words, these factors, subject to slow change and over a long period, may be considered as given or stable.

### **Objective Factors:**

The objective factors are external to economic system. They undergo rapid changes and bring market in the consumption function. The main objective factors are as under:

- 1. Real Income:** Real income is the basic factor which determines community's propensity to consume. When real income of the community increases, consumption expenditure also increases but by a smaller amount. The consumption function shifts upward.
- 2. Distribution of wealth:** If there is unequal distribution of wealth in a country, the consumption function will also be unequal. People with low income group have high propensity to consume and rich people low propensity to consume. An equal distribution of wealth raises the propensity to consume.
- 3. Expectation Change in Price:** If people expect prices are going to rise in near future, they hasten to spend large sum out of a given income just after the promulgation of first Martial Law in our country. So we can say that when prices are expected to be high in future, the propensity to consume increases or the consumption function shifts upward. When they are expected to be low, the propensity to consume decreases or the consumption function shifts downward.
- 4. Changes in Fiscal Policy:** Taxes also play an important part in influencing the propensity to consume. If the nature of taxes is such that they directly affect the poor people and reduce their income, then the propensity to consume is high and if rich persons are not taxed at a progressive rate and they accumulate more wealth, then the propensity to consume is low.
- 5. Change in the Rate of Interest:** A change in the rate of interest exercises influence on the propensity to consume. When the interest rate is raised, it generally induces people to decrease expenditure and save more for lending purposes. On the other hand, when the interest rate is reduced, it usually encourages expenditure as lending then becomes less attractive. So we conclude that an increase in the rate of interest generally reduces propensity to consume or shifts the consumption function downward and a fall in the rate of interest usually helps to the increase of propensity to consume or shifts the consumption function upward.
- 6. Availability of Goods:** Propensity to consume is also affected by the availability of consumption goods. If the goods are available in abundance, then the propensity to consume increases. If they are scarce and are priced very high, then the propensity to consume will decline.

- 7. Credit Facilities:** cheap credit facilities are available in the country, the consumption function will move upward.
- 8. Higher Living Standard:** If the real income of the people increases in the country and people adopt the use of new produce like television, washing machines, refrigerators, cars, etc., etc., the consumption function is high.
- 9. Stock of Liquid Assets:** If the consumer have greater amounts of liquid assets; there will be more desire for the households to spend out of disposable income. The consumption function shifts upward and vice versa.
- 10. Consumer Indebtedness:** In case the consumer are heavily indebted and they pay bigger monthly installments to repay the debt, then propensity to consume is low or the consumption function shifts downward and vice versa.
- 11. Windfall Gains:** If there are unexpected gains due to stock market boom in the economy, it tends to shift the consumption function upward. They are windfall gains. The unexpected losses in the stock market lead to the downward shifting of the consumption curve.
- 12. Demographic Factors:** The consumption function is also influenced by demographic factors like size of family, occupations, place of residence etc. Persons living in cities, for instance, spend more than those living in rural areas.
- 13. Attitude Towards Saving:** If a community is consumption oriented, there will be less saving in the country. The consumption function shifts upward. In case, people save more and spend less, then the consumption function will shift downward.
- 14. Demonstration Effect:** If people are easily influenced by advertisements on radio and television and seeing pattern of living of the rich neighbors, the level of total consumption will go up.

#### **Psychological Law of Consumption By J.M Keynes:**

**J.M. Keynes**, in his book 'General Theory' analyzed the consumption behavior of the community on the basis of human psychology. He propounded a law which is known as *Psychological Law of Consumption*.

According to this law:

"The household sector spends a major part of its income on the purchase of consumer goods and services such as food, clothing, medicines, shelter etc., for personal satisfaction. The expenditure on consumption (C) is the largest component of aggregate expenditure. Whatever is not consumed out of disposable income is by definition called saving (S)".



**Formula:**

**Disposable Income = Consumption + Saving**

$$I = C + S$$

Explanation:

According to Keynes, the level of consumption in a community depends upon the level of disposable income. As income increases, consumption also increases but it increases not as fast as income i.e., it increases at a diminishing rate. This relationship between consumption and disposable income is called *consumption function*.

In the words of **Keynes**:

“Men are disposed as a rule and on the average to increase their consumption as their income increases, but not by as much as the increase in their income.”

The *Keynesian consumption function* is now explained with the help of schedule and a curve.

Schedule:

(\$ in billion)

Disposable Income (Y)	Consumption (C)	Saving (S)	APC (C/Y)	MPC ( $\Delta C/\Delta Y$ )
0	50	-50		
100	100	0	1.00	0.5
200	150	50	0.75	0.5
300	200	100	0.67	0.5

In the schedule, it is shown that as the nation's disposable income increases, the aggregate consumption at various levels of income also increases but at a decreasing rate.

**Summing up**, the relationship between *consumption and disposable income* is referred to as *consumption function*. A consumption function tells how much households plan to consume at various levels of disposable income.

**PROPENSITY TO CONSUME:**

The **classical economists** were of the view that the supply of saving was determined by the rate of interest prevailing in the country. According to them, the higher the rate of interest, the larger is the saving and so less is the consumption.

**Keynes** disagreed with the above view. According to him interest is not the primary determinant of an individual's saving and consumption decisions. It is primarily the individual's real income



which determines his, saving and consumption decisions. **J.M. Keynes** has developed two concepts:

- (i) Average Propensity to Consume.
- (ii) Marginal Propensity to Consume to Analyze the Consumption Function.

### Explanation:

#### (1) Average Propensity to Consume (APC):

Average propensity to consume ( APC) may be defined as:

#### Definition:

"A ratio of total consumption to total disposable income for different levels of disposable income It is calculated by dividing the amount of consumption by disposable income for any given level of income".

#### Example:

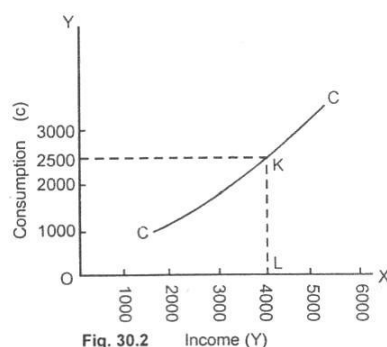
For instance, when nation's disposable income is \$2,000 billion, consumption expenditure is \$1,500 billion, the average propensity to consumption is  $1500/2000 = 0.75$ .

This shows that out of the disposable income of \$2,000 billion, 75% will be used for consumption purposes. The APC declines as income increases because the proportion of income spent on consumption decreases. The average propensity to consume spent on consumption decreases. The average propensity to consume at any level of income is expressed in **equation as  $C/Y$** . Here C stands for consumption Y for income.

#### Formula:

$$APC = \frac{C}{Y}$$

#### Diagram:



In the diagram income is plotted on OX axis and consumption along OY. CC curve represents the propensity to consume schedule. At point K, the average propensity to consume is equal to 0.62.

$$KL/OL = (C/Y) \text{ i.e., } 2500/4000 \text{ or } 25/40 = 0.62$$

APC implies a point on the curve C which indicates the ratio of income consumed. The C curve is made up of a series such points.

**(2) Marginal Propensity to Consume (MPC):**

**Definition:**

The concept of *marginal propensity to consume* is very important in macro economics. **J.M. Keynes** has defined marginal propensity to consume (MPC):

"As the relationship between a change in consumption ( $\Delta C$ ) that resulted from a change in disposable income ( $\Delta Y$ )".

Formula:

It is found out by dividing change in consumption to a given change in disposable Income.

$$\text{MPC} = \frac{\text{Change in Consumption}}{\text{Change in Income}} = \frac{\Delta C}{\Delta Y}$$

Example:

Thus we make this concept clear by taking an example, let us suppose the disposable income rises from \$2000 billion to \$3000 billion (by \$1000 billion) and the consumption expenditure increases from \$1500 billion to \$2000 billion (by \$500 billion). The marginal propensity to consume is:

$$\Delta C / \Delta Y = 500 / 1000 = 1/2 = 0.5$$

**INVESTMENT:**

Investment is an important component of national income. It plays an important role in the determination of equilibrium level of national income and corresponding level of employment.

When the term investment is used in economics, it refers to the:

"Expenditure incurred by individuals and businesses on the purchase of new plant and machinery, the building of the houses, factories, schools, construction of roads etc. It is, in other words the acquisition of new physical capital".

**Investment Expenditures:**

Investment, in brief, includes the following kinds of expenditures:

**(i) Stock or Inventories:**

The inventories expenditures incurred by businesses on the purchase of new raw material, semi finished goods and on stock of unsold goods (inventories) are counted as investment.

**(ii) Fixed Capital:**

The expenditure made on new plants and machinery vehicles, houses facilities, etc., are also included in investment. In the words of J.M. Keynes:

"**Investment means** real investment which refers to increase in the real capital stock of the economy".

### Types of Investment:

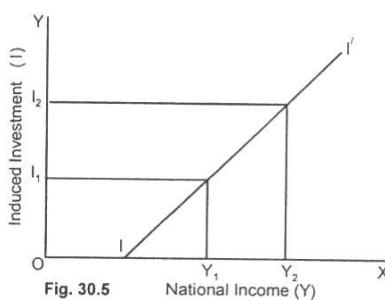
There are two types of investment (1) Induced investment and (2) Autonomous investment.

There two are now explained brief:

#### (1) Induced Investment:

Investment in the economy is influenced by the income or output of the economy. The large the national income, the higher is the investment. Induced investment is the change in investment which is induced by the change in the national income. The investment function signifies that as the real national income rises, the level of inducement investment also rises and as the real national falls. The level of investment also down.

#### Diagram:



In figure (30.5), it is shown that investment curve  $I'$  is positively sloped. It indicates that as the level of national income rises from  $OY^1$  to  $OY^2$ , the level of induced investment also rises from  $OI^1$  to  $OI^2$ .

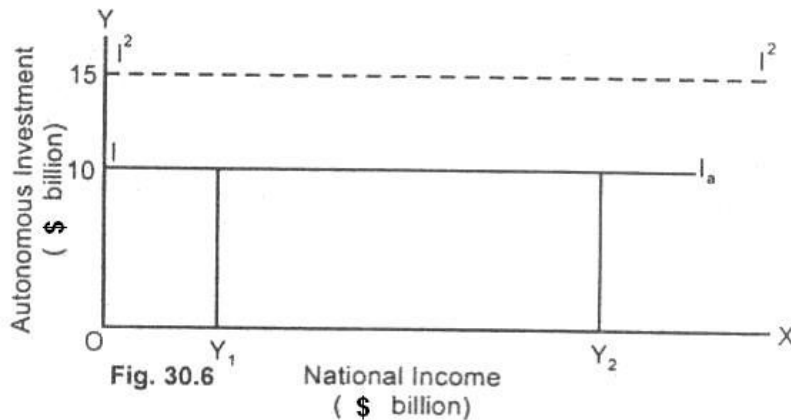
**Shift in the Investment Curve:** The induced investment is the increasing function of profit. If firm expect profit, they are induced to invest. The profit expectation of firms depend upon aggregate demand for goods and services in the economy. The level of aggregate demand itself depends upon the level of national income. The higher the level of national income, the higher thus is the level of induced investment.

#### (2) Autonomous Investment:

The investment which is not influenced by changes in national income is **autonomous investment**. In other words an autonomous investment is independent of the level national income.

As regards the size of autonomous investment, it is influenced by many basic factors such as increase in population. Manpower, level of technology, the role of interest, the expectations of future economic growth and the role of capacity utilization etc.

**Diagram:**



In figure (30.6) it is shown that autonomous investment curve  $I_a$  is a horizontal straight line. For example, when national income is  $OY_1$  the autonomous investment is \$10 billion. If national income increases to  $OY_2$  the autonomous investment remains \$10 billion and so on.

In case, there is an introduction of new technologies, or the rate of interest falls or if the businessmen expect the sales to grow more, the producer choose to operate to full capacity, the autonomous investment is influenced. The autonomous investment curve shifts upward from \$10 billion to \$15 billion.

### SAVING:

The income not spent on consumption is defined as Saving. **Saving** is the act of not consuming all of one's current income. Whatever is not consumed out of disposable income is by definition saving.

Formula:

The *economy's saving equation* is:

$$\text{Saving} = \text{Disposable Income} - \text{Consumption}$$

### Motives of Saving:

There are several motives which induce people to save. They can be grouped under two headings (i) Power to save, (ii) Will to save.

### **(1) Power to Save:**

**Power to save** depends upon the level of income which a person earns. In case of a nation, power to save depends on proper utilization of natural resources. It is because when the income is low, then almost the whole amount is spent on meeting the bare necessities of life. So saving is very nominal. But in case of high income, one can save if he likes because he has got the surplus income over consumption.

### **(2) Will to Save:**

The willingness to save is influenced by subjective and objective considerations, which are as under:

#### **Subjective Considerations:**

**(i) Foresight:** People save money as a provision against some unforeseen circumstances which might arise in the future. A few others accumulate wealth for their dependants. All these prudential considerations can be constituted under the heading foresight.

**(ii) Social and political considerations:** Wealth gives power over other men in the economic sphere and also political and social influence. The desire of prestige, power and respect in social sphere and political life actuates human beings to save.

**(iii) Temperamental considerations:** There are a few persons who save neither for their families nor for their own use but merely because they have acquired a sort of mania for accumulation of wealth for its own sake.

#### **Objective Consideration:**

**(i) Security of life and property:** If there is security of life and property in a country, the saving is encouraged.

**(ii) Facilities for investment:** If facilities of profitable investment are available, then saving is stimulated.

**(iii) Monetary stability:** Monetary stability also plays a very important part in the value of money, then saving is discouraged and if the value of money is expected to rise, the saving is encouraged.

**(iv) Saving and the rate of interest:** It is one of the very important factors which exercises influences on the volume of saving. If the rate of interest is high, it generally induces people to save more money and if it is low, the saving is discouraged. However, there will of course be a few people who will try to save more when the interest rate is low save less when the interest rate is high just to provide for themselves a certain annual income for their old age or for their dependants.

### PARADOX OF THRIFT

**Definition:** Paradox of thrift was popularized by the renowned economist John Maynard Keynes. It states that individuals try to save more during an economic recession, which essentially leads to a fall in aggregate demand and hence in economic growth. Such a situation is harmful for everybody as investments give lower returns than normal.

**Description:** Keynes further said that such a mass increase in savings eventually hurts the economy as a whole.

This theory was heavily criticized by non-Keynesian economists on the ground that an increase in savings allows banks to lend more. This will make interest rates go down and lead to an increase in lending and, therefore, spending.

#### What it is?

The paradox of thrift is an economic theory that states that the more people save, the less they spend and thus the less they stimulate the economy.

#### How it works? (Example):

Developed by economist John Maynard Keynes, the paradox of thrift works this way: Assume everybody receives \$1,000 of income. They save 50% (\$500) and spend the rest (\$500). This means everybody is spending \$500, which supports demand for products, which in turn creates jobs, encourages entrepreneurship, and generates tax revenue for the government.

Now let's assume that everybody decides they need to save more for retirement. They start saving \$750 of their \$1,000 and spending only \$250. Suddenly, there is a drop in the demand for goods and services. Businesses can't make a profit, and so they lay off workers, which raises unemployment and lowers the tax revenue to the government. The unemployed people, who now are out their income, stop spending altogether, which worsens the problem even more. The whole thing continues on a downward spiral.

### THE MULTIPLIER:

Keynes' Multiplier Theory gives great importance to increase in public investment and government spending for raising the level of income and employment. Both consumption and investment create employment. But both have complementary relationship with one another. When investment increases, consumption increases too and helps in creating employment. It is only when the level of full employment has been reached that investment and consumption become competitive instead of being complementary; then increase in one will reduce the other, one will be at the expense of the other.

### **Kahn's Employment Multiplier:**

Kahn's Multiplier is known as Employment Multiplier, and Keynes' Multiplier is known as Investment Multiplier. According to Kahn's Employment Multiplier, when government undertakes public works like roads, railways, irrigation works then people get employment. This is initial or primary employment. These people then spend their income on consumption goods. As a result, demand for consumption goods increases, which leads to increase in the output of concerned industries which provides further employment to more people. But the process does not end here. The entrepreneurs and workers in such industries, in which investment has been made, also spend their newly obtained income which results in increasing output and employment opportunities. In this way, we see that the total employment so generated is many times more than the primary employment.

Suppose the government employs 300,000 persons on public works and, as a result of increase in consumer goods, 600,000 more persons get employment in the concerned industries. In this way, 900,000 persons have been able to get employment, that is, three times more people are now employed. In other words, Kahn's employment multiplier means that by the government undertaking public works many more times total employment is provided as compared with initial employment.

### **Keynes' Income or Investment Multiplier:**

Keynes' income multiplier tells us that a given increase in investment ultimately creates total income which is many times the initial increases in income resulting from that investment. That is why it is called income multiplier or investment multiplier. Income multiplier indicates how many times the total income increases by a given initial investment.

Suppose Rs. 100 million are invested in public works and as a result there is an increase of Rs. 300 million in income. In this case, income has been increased 3 times, i.e., the multiplier is 3. If  $\Delta I$  represents increase in investment,  $\Delta Y$  indicates increase in income and  $K$  is the multiplier, then the equation of multiplier is as follows:

$$K = \frac{\Delta Y}{\Delta I}$$

----- (i)

The multiplier is the numerical co-efficient showing how large an increase in income will result from each increase in investment. The multiplier is the number by which the change in investment must be multiplied in order to get the resulting change in income. It is the ratio of change in

income to the change in investment. If an investment of Rs. 50 million increases income by Rs. 150 million, the income multiplier is 3 and if Rs. 200 million, the multiplier is 4 and so on.

In the following multiplier equation, the relationship between income and investment is determined through marginal propensity to consume:

$$K = \frac{1}{1 - mpc} \text{-----(ii)}$$

Where:

$$1 - mpc = mps$$

(mps: Marginal Propensity to Save)

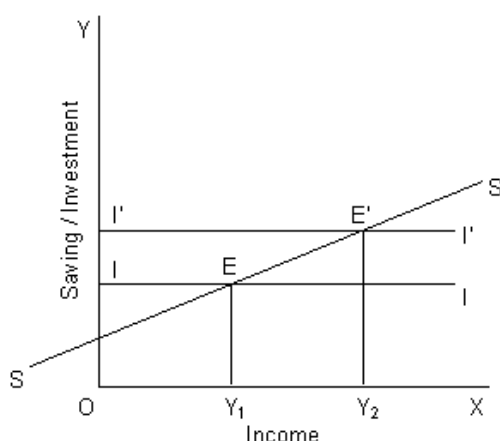
Therefore, the third multiplier equation is:

$$K = \frac{1}{mps} \text{-----(iii)}$$

It should be noted that the size of multiplier varies directly with the size of mpc. When the mpc is high, the multiplier is high and when the mpc is low, the multiplier is also low.

The multiplier works not only in money terms but also in real terms. In other words, the increase in income takes place not only in the form of money but in the form of goods and services.

**Saving-Investment Approach:** In order to simplify the analysis of income determination we imagine an economy (1) where there are no taxes levied by the government, (2) the corporations retain no earnings, and (3) there are no changes in the level of prices. The equilibrium level of NI is determined at a point where planned or intended saving is equal to planned or intended investment, or in other words, where the saving intersect the investment. It is further explained with the help of following diagram:



**Figure 2 – Multiplier Effect (b)**



The above diagram shows the multiplier effect of an increase in investment on the equilibrium level of income. SS is the supply curve and II is the investment curve showing the total level of investment of OI. These two curves intersect each other at the equilibrium point E where income is  $OY_1$ . If now there is a change in investment from OI to  $OI'$ , i.e., an increase of  $II'$ , then the II curve will shift to the position of  $I'I'$  and the two curves  $I'I'$  and SS intersect each other at the new equilibrium point  $E'$ , where the income is  $OY_2$ . Now it is clear that when mps is  $\frac{1}{2}$ , an increase in investment by  $II'$  (let say Rs. 10 million) has led to the increase in income by  $Y_1Y_2$  (let say Rs. 30 million). Obviously the value of the multiplier is equal to 3.

### **Limitations of Multiplier:**

- (a) **Efficiency of production:** If the production system of the country cannot cope with increased demand for consumption goods and make them readily available, the incomes generated will not be spent as visualised. As a result, the mpc may decline.
- (b) **Regular investment:** The value of the multiplier will also depend on regularly repeated investments. A steadily increasing investment is essential to maintain the tempo of economic activity.
- (c) **Multiplier period:** Successive doses of investment must be injected at suitable intervals if the multiplier effect is not to be lost.
- (d) **Full employment ceiling:** As soon as full employment of the idle resources is achieved, further beneficial effect of the multiplier will practically cease.

### **Importance of Multiplier:**

Keynes' principle of multiplier has a great role in removing the Great Depression of 1929-34. These days governments are actively interfere in the economic affairs of the community through multiplier. Its importance is further explained as below:

1. The multiplier principle *focuses on the importance of public investment*, which is the key to remove unemployment during the days of depression. An investment of Rs. 1 million can create income and employment worth many times, and can help the government to remove unemployment from the country.
2. During the days of depression, the private entrepreneurs are discouraged to invest in the economy. Therefore, to fill this gap, *the government comes forward and undertakes the investment* in her own hands. Hence, the demand for consumer goods increases and also the level of NI and employment increases on account of the working of the multiplier.

3. When the demand for goods increases and incomes rise owing to government investment, the *profit expectations of the entrepreneurs go up* and as a result the MEC rises.
4. When the government makes investment in public works to fight depression and unemployment, *private investment is encouraged* on account of the operation of the multiplier. The confidence of private investors is restored, and hence helps in further removing the economic depression of the country.

### The Circular Flow of Income:

#### Meaning:

The circular flow of income and expenditure refers to the process whereby the national income and expenditure of an economy flow in a circular manner continuously through time.

#### Circular Flow in a Two Sector Economy:

We begin with a simple hypothetical economy where there are only two sectors, the household and business. The household sector owns all the factors of production, that is, land, labour and capital. This sector receives income by selling the services of these factors to the business sector.

The business sector consists of producers who produce products and sell them to the household sector or consumers. Thus the household sector buys the output of products of the business sector. The circular flow of income and expenditure in such an economy is shown in Figure 1 where the product market is shown in the upper portion and the factor market in the lower portion.

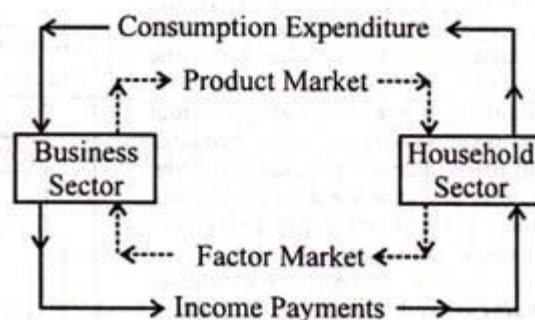


Fig. 1.

In the product market, the household sector purchases goods and services from the business sector while in the factor market the household sector receives income from the former for providing services. Thus the household sector purchases all goods and services provided by the business sector and makes payments to the latter in lieu of these.

The business sector, in turn, makes payments to the households for the services rendered by the latter to the business-wage payments for labour services, profit for capital supplied, etc. Thus

payments go around in a circular manner from the business sector to the household sector and from the household sector to the business sector, as shown by arrows in the output portion of the figure.

### Circular Flow with Saving and Investment Added:

The actual economy is not as explained above. In an economy, “inflows” and “leakages” occur in the expenditure and income flows. Such leakages are saving, and inflows or injections are investment which equals each other.

**Figure 2 shows how the circular flow of income and expenditure is altered by the inclusion of saving and investment.**

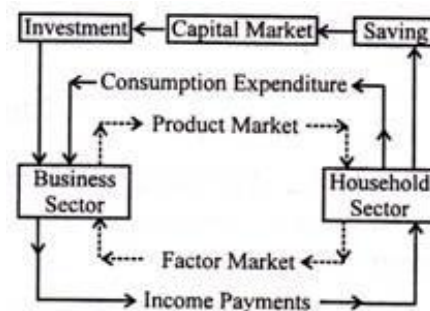


Fig. 2.

In Figure 2 there is a capital or credit market in between saving and investment flows from households to business firms. The capital market refers to a number of financial institutions such as commercial banks, savings banks, loan institutions, the stock and bond markets, etc. The capital market coordinates the saving and investment activities of the households and the business firms. The households supply saving to the capital market and the firms, in turn, obtain investment funds from the capital market.

### Circular Flow in a Three- Sector Closed Economy:

So far we have been working on the circular flow of a two-sector model of an economy. To this we add the government sector so as to make it a three-sector closed model of circular flow of income and expenditure. For this, we add taxation and government purchases (or expenditure) in our presentation. Taxation is a leakage from the circular flow and government purchases are injections into the circular flow.

First, take the circular flow between the household sector and the government sector. Taxes in the form of personal income tax and commodity taxes paid by the household sector are outflows or leakages from the circular flow.

But the government purchases the services of the households, makes transfer payments in the form of old age pensions, unemployment relief, sickness benefit, etc., and also spends on them to provide certain social services like education, health, housing, water, parks and other facilities. All such expenditures by the government are injections into the circular flow.

Next take the circular flow between the business sector and the government sector. All types of taxes paid by the business sector to the government are leakages from the circular flow. On the other hand, the government purchases all its requirements of goods of all types from the business sector, gives subsidies and makes transfer payments to firms in order to encourage their production. These government expenditures are injections into the circular flow.

Now we take the household, business and government sectors together to show their inflows and outflows in the circular flow. As already noted, taxation is a leakage from the circular flow. It tends to reduce consumption and saving of the household sector. Reduced consumption, in turn, reduces the sales and incomes of the firms. On the other hand, taxes on business firms tend to reduce their investment and production.

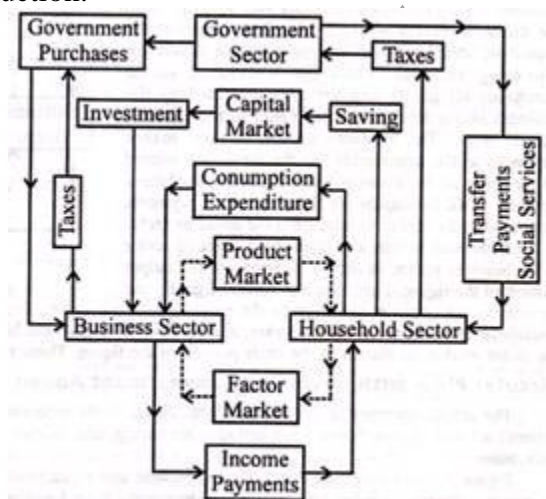


Fig. 3.

### Keynesian Theory of Income and Employment:

#### Definition and Explanation:

**John Maynard Keynes** was the main critic of the classical macro economics. He in his book 'General Theory of Employment, Interest and Money' out-rightly rejected the Say's Law of Market that supply creates its own demand. He severely criticized **A.C. Pigou's** version that cuts in real wages help in promoting employment in the economy. He also opposed the idea that saving and investment can be brought about through changes in the rate of interest. In addition to this, the assumption of full employment in the economy is not realistic.

So long as the economy was operating smoothly, the classical analysis of aggregate economy met no serious opposition. However, Great Depression of 1930's created problems of increasing unemployment, reducing national income, declining prices and failing firms increased in intensity. The classical model miserably failed to explain and provide a workable solution for how to escape the depression.

It was at that time when J. M. Keynes wrote his famous book 'General Theory'. In it he presented an explanation of the Great Depression of 1930's and suggested measures for the solution. He also presented his own theory of income and employment. According to Keynes:

"In the short period, level of national income and so of employment is determined by aggregate demand and aggregate supply in the country. The equilibrium of national income occurs where aggregate demand is equal to aggregate supply. This equilibrium is also called effective demand point".

### **What is Effective Demand?**

Effective demand represents that aggregate demand or total spending (consumption expenditure and investment expenditure) which matches with aggregate supply (national income at factor cost).

In other words, effective demand is the signification of the equilibrium between aggregate demand (C+I) and aggregate supply (C+S). This equilibrium position (effective demand) indicates that the entrepreneurs neither have a tendency to increase production nor a tendency to decrease production. It implies that the national income and employment which correspond to the effective demand are equilibrium levels of national income and employment.

Unlike classical theory of income and employment, Keynesian theory of income and employment emphasizes that the equilibrium level of employment would not necessarily be full employment. It can be below or above the level of full employment.

### **Determinants of Income:**

The determinants of effective demand and so of equilibrium level of national income and employment are the aggregate demand and aggregate supply.

### **(1) Aggregate Demand (C+I):**

Aggregate demand refers to the sum of expenditure, households, firms and the government is undertaking on consumption and investment in an economy. The aggregate demand price is the amount of money which the entrepreneurs expect to receive as a result of the sale of output produced by the employment of certain number of workers. An increase in the level of employment raises the expected proceeds and a decrease in the level of employment lowers it.

The aggregate demand curve AD (C+I) would be positively sloping signifying that as the level of employment increases, the level of output also increases, thereby increasing of aggregate demand (C+I) for goods. The aggregate demand (C+I), thus, depends directly on the level of real national income and indirectly on the level of employment.

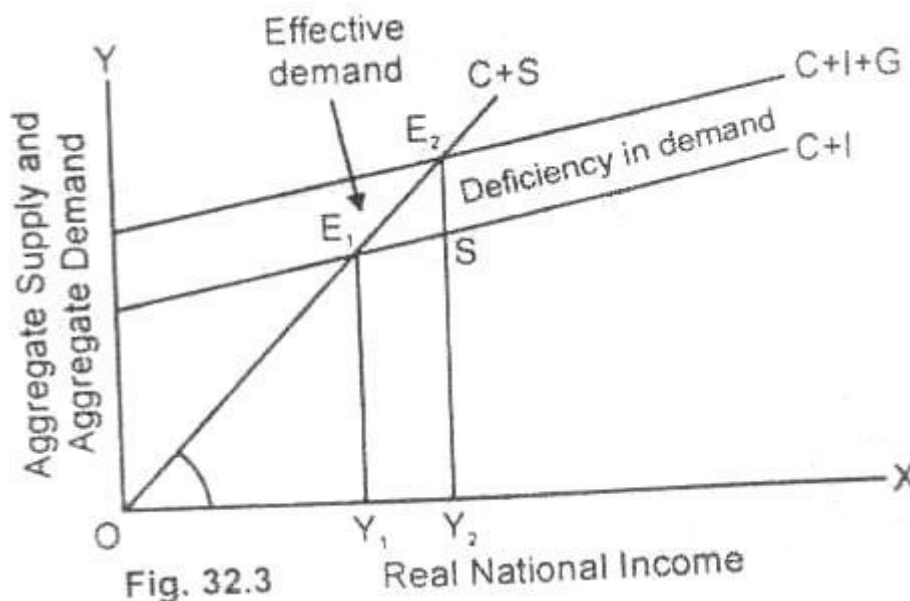
### **(2) Aggregate Supply (C+S):**

The aggregate supply refers to the flow of output produced by the employment of workers in an economy during a short period. In other words, the aggregate supply is the value of final output valued at factor cost. The aggregate supply price is the minimum amount of money which the entrepreneurs must receive to cover the costs of output produced by the employment of certain number of workers.

The aggregate supply is denoted by (OS) because a part of this is consumed (C) and the other part is saved (S) in the form of inventories of unsold output. The aggregate supply curve, (C+S) is positively sloped indicating that as the level of employment increases, the level of output also increases, thereby, increasing the aggregate, supply. Thus, the aggregate supply (C+S) depends upon the level of employment through the economy's aggregate production function.

### **Determination of Level of Employment and Income:**

According to Keynes, the equilibrium levels of national income and employment are determined by the interaction of aggregate demand curve (AD) and aggregate supply curve (AS). The equilibrium level of income determined by the equality of AD and AS does not necessarily indicate the full employment level. The equilibrium position between aggregate demand and aggregate supply can be below or above the level of full employment as is shown in the curve below.

**Diagrammatic Explanation**

In the figure (32.3), the aggregate demand curve ( $C+I$ ), intersects the aggregate supply curve ( $OS$ ) at point  $E_1$  which is an effective demand point. At point  $E_1$ , the equilibrium of national income is  $OY_1$ . Let us assume that in the generation of  $OY_1$  level of income, some of the workers willing to work have not been absorbed. It means that  $E_1$  (effective demand point) is an under employment equilibrium and  $OY_1$  is under employment level of income.

The unemployed workers can be absorbed if the level of output can be increased from  $OY_1$  to  $OY_2$  which we assume is the full employment level. We further assume that due to spending by the government, the aggregate demand curve ( $C+I+G$ ) rises. As a result of this, the economy moves from lower equilibrium point  $E_1$  to higher equilibrium point  $E_2$ . The  $OY$  is now the new equilibrium level of income along with full employment. Thus  $E_2$  denotes full employment equilibrium position of the economy.

Thus government spending can help to achieve full employment. In case the equilibrium level of national income is above the level of full employment, this means that the output has increased in money terms only. The value of the output is just the same to the national income at full employment level.



### **Importance of Effective Demand:**

The principle of effective demand is the most important contribution of J.M. Keynes. Its importance in macro economics, in brief, is as under:

**(i) Determinant of employment.** Effective demand determines the level of employment in the country. As effective demand increases employment also increases. When effective demand falls, the level of employment also decreases.

**(ii) Say's Law falsified.** It is with the help of the principle of effective demand that Says Law of Market has been falsified. According to the concept of effective demand whatever is produced in the economy is not automatically consumed. It is partly saved. As a result, the existence of full employment is not possible.

**(iii) Role of investment.** The principle of effective demand explains that for achieving full employment level, real investment must equal to the gap between income and consumption. In other words, employment cannot expand, unless investment expands. Therein lies the importance of the concept of effective demand.

**(iv) Capitalistic economy.** The principle of effective demand makes clear that in a rich community, the gap between income and expenditure is large. If required investment is not made to fill this gap, it will lead to deficiency of effective demand resulting in unemployment.

### **Criticism on Keynesian Theory:**

From mid 1970 onward, the Keynesian theory of employment came under sharp criticism from the monetarists. Milton Frsadman, the Chief advocate of monetarists rejected the Keynesianism as a whole. The monetarists returned back to the old classical theory for the explanation of the rise in general price level and stated that inflation is always and every where a monetary phenomenon.

The monetarists are of the view that J. M. Keynes laid more emphasis on the determinants of aggregate demand and to a greater extent ignored the determinants of aggregate supply. The monetarists encouraged the supply side policy and thus favored free enterprise economy for solving the problems of unemployment and inflation.



## **UNEMPLOYMENT IN INDIA:**

Unemployment may be defined as *“a situation in which the person is capable of working both physically and mentally at the existing wage rate, but does not get a job to work”*.

In other words unemployment means only involuntary unemployment wherein a person who is willing to work at the existing wage rate does not get a job.

Types of Unemployment in India:

### **1. Open Unemployment:**

Open unemployment is a situation where in a large section of the labour force does not get a job that may yield them regular income. This type of unemployment can be seen and counted in terms of the number of unemployed persons. The labour force expands at a faster rate than the growth rate of economy. Therefore all people do not get jobs.

### **2. Disguised Unemployment:**

It is a situation in which more people are doing work than actually required. Even if some are withdrawn, production does not suffer. In other words it refers to a situation of employment with surplus manpower in which some workers have zero marginal productivity.

So their removal will not affect the volume of total production. Overcrowding in agriculture due to rapid growth of population and lack of alternative job opportunities may be cited as the main reasons for disguised unemployment in India.

### **3. Seasonal Unemployment:**

It is unemployment that occurs during certain seasons of the year. In some industries and occupations like agriculture, holiday resorts, ice factories etc., production activities take place only in some seasons. So they offer employment for only a certain period of time in a year. People engaged in such type of activities may remain unemployed during the off-season.

### **4. Cyclical Unemployment:**

It is caused by trade cycles at regular intervals. Generally capitalist economies are subject to trade cycles. The down swing in business activities results in unemployment. Cyclical unemployment is normally a short-run phenomenon.

### **5. Educated Unemployment:**

Among the educated people, apart from open unemployment, many are underemployed because their qualification does not match the job. Faulty education system, mass output, preference for white collar jobs, lack of employable skills and dwindling formal salaried jobs are mainly

responsible for unemployment among educated youths in India. Educated unemployment may be either open or underemployment.

**6. Technological Unemployment:**

It is the result of certain changes in the techniques of production which may not warrant much labour. Modern technology being capital intensive requires less labourers and contributes to this kind of unemployment.

**7. Structural Unemployment:**

This type of unemployment arises due to drastic changes in the economic structure of a country. These changes may affect either the supply of a factor or demand for a factor of production. Structural unemployment is a natural outcome of economic development and technological advancement and innovation that are taking place rapidly all over the world in every sphere.

**8. Underemployment:**

It is a situation in which people employed contribute less than their capacity to production. In this type of unemployment people are not gainfully employed. They may be employed either on part-time basis, or undertake a job for which lesser qualification is required. For example a Post Graduate may work as a clerk for which only S.S.L.C. is enough.

**9. Casual Unemployment:**

When a person is employed on a day-to-day basis, casual unemployment may occur due to short-term contracts, shortage of raw materials, fall in demand, change of ownership etc.

**10. Chronic Unemployment:**

If unemployment continues to be a long term feature of a country, it is called chronic unemployment. Rapid growth of population and inadequate level of economic development on account of vicious circle of poverty are the main causes for chronic unemployment.

**11. Frictional Unemployment:**

Frictional unemployment is caused due to improper adjustment between supply of labour and demand for labour. This type of unemployment is due to immobility of labour, lack of correct and timely information, seasonal nature of work. etc.

**Causes of Unemployment in India:**

The important causes of Unemployment in India are as follows:

1. Rapid growth of population and increase in labour force.
2. Underdevelopment of the economy.
3. Slow growth in the agricultural sector.
4. Defective system of education.

5. Absence of manpower planning.
6. Degeneration of village industries.
7. Inappropriate technology.
8. Slow growth of industrial sector.
9. Immobility of labour.
10. Jobless growth.

### MONEY

In **economics money** is defined as an asset (a store of value) which functions as a generally accepted medium of exchange, i.e., it can in principle be used directly to buy any good. A note of IOU (a bill of exchange) may also be a medium of exchange, but it is not generally accepted and is therefore not **money**.

Money is one of the greatest inventions of mankind. According to Walker, "Money is what Money does."

In a wider sense, Money includes all mediums of exchanges like Gold, Silver, Copper, Paper, Cheques, and Bills of exchange, etc.

### Definition of Money

According to Crowther, "Anything that is generally acceptable as a means of exchange and which at the same time acts as a measure and store of value."

Thus, Anything is Money, which is generally acceptable as a medium of exchange, and at the same time it must act as a measure and a store of value. Anything implies a thing to be used as money need not be necessarily composed of any precious metal. The only necessary condition is that, it should be universally accepted by people as a medium of exchange.

### Functions of Money

1. **Medium of exchange** : Money acts as a medium of exchange as it's generally accepted. On the payment of money, purchase of goods and services can be made i.e. goods and services are exchanged for money. Money bifurcates buying and selling activities separately so it facilitates the exchange transactions.
2. **Measure of value** : Money is a common measure of value so it is possible to determine the rate of exchange between various goods and services purchased by the people. Exchange value of commodity can be expressed in terms of money. For e.g. we can say that 10 metres of Cotton Cloth cost \$220 dollars or Rs.10,000 rupees only.

3. **Store of value :** Money acts as a store of value. Money being generally acceptable and its value being more or less stable, it is ideal for use as a store of value. Being non-perishable and also comparatively stable in value, the value of other assets can be stored in the form of money. Property can be sold and its value can be held in money and converted into other assets as and when necessary.
4. **Standard or Deferred payment :** Money is also inevitably used as the unit in terms of which all future or deferred payments are stated. Future transactions can be carried on in terms of money. The loans, which are taken at present, can be repaid in money in the future. The value of the future payments is regulated by money.
5. **Transfer of value :** Value of any asset can be transferred from one person to another or to any institution or to any place by transferring money. The transfer of money can take place irrespective of places, time and circumstances. Transfer of purchasing power, which is necessary in commerce and other transactions, has become available because of money.

## **MONETARY SYSTEM**

A monetary system is the set of institutions by which a government provides money in a country's economy. Modern monetary systems usually consist of mints, central banks and commercial banks.

Any formal structure adapted by a government that issues a currency which is accepted as the medium of exchange by its citizens and by other governments. Most monetary systems are managed by a central bank which is given the authority to print money and control its supply in the economy.

## **Functions of RBI**

As a central bank, the Reserve Bank has significant powers and duties to perform. For smooth and speedy progress of the Indian Financial System, it has to perform some important tasks. Among others it includes maintaining monetary and financial stability, to develop and maintain stable payment system, to promote and develop financial infrastructure and to regulate or control the financial institutions.

*For simplification, the functions of the Reserve Bank are classified into the traditional functions, the development functions and supervisory functions.*

### **Traditional Functions of RBI**

Traditional functions are those functions which every central bank of each nation performs all over the world. Basically these functions are in line with the objectives with which the bank is set up. It includes fundamental functions of the Central Bank. They comprise the following tasks.

1. **Issue of Currency Notes :** The RBI has the sole right or authority or monopoly of issuing currency notes except one rupee note and coins of smaller denomination. These currency notes are legal tender issued by the RBI. Currently it is in denominations of Rs. 2, 5, 10, 20, 50, 100, 500, and 1,000. The RBI has powers not only to issue and withdraw but even to exchange these currency notes for other denominations. It issues these notes against the security of gold bullion, foreign securities, rupee coins, exchange bills and promissory notes and government of India bonds.
2. **Banker to other Banks :** The RBI being an apex monetary institution has obligatory powers to guide, help and direct other commercial banks in the country. The RBI can control the volumes of banks reserves and allow other banks to create credit in that proportion. Every commercial bank has to maintain a part of their reserves with its parent's viz. the RBI. Similarly in need or in urgency these banks approach the RBI for fund. Thus it is called as the lender of the last resort.
3. **Banker to the Government :** The RBI being the apex monetary body has to work as an agent of the central and state governments. It performs various banking function such as to accept deposits, taxes and make payments on behalf of the government. It works as a representative of the government even at the international level. It maintains government accounts, provides financial advice to the government. It manages government public debts and maintains foreign exchange reserves on behalf of the government. It provides overdraft facility to the government when it faces financial crunch.
4. **Exchange Rate Management :** It is an essential function of the RBI. In order to maintain stability in the external value of rupee, it has to prepare domestic policies in that direction. Also it needs to prepare and implement the foreign exchange rate policy which will help in attaining the exchange rate stability. In order to maintain the exchange rate stability it has to bring demand and supply of the foreign currency (U.S Dollar) close to each other.
5. **Credit Control Function :** Commercial bank in the country creates credit according to the demand in the economy. But if this credit creation is unchecked or unregulated then it leads the economy into inflationary cycles. On the other credit creation is below the required limit then it harms the growth of the economy. As a central bank of the nation the RBI has to look for

growth with price stability. Thus it regulates the credit creation capacity of commercial banks by using various credit control tools.

6. **Supervisory Function :** The RBI has been endowed with vast powers for supervising the banking system in the country. It has powers to issue license for setting up new banks, to open new branches, to decide minimum reserves, to inspect functioning of commercial banks in India and abroad, and to guide and direct the commercial banks in India. It can have periodical inspections and audit of the commercial banks in India.

### **Developmental / Promotional Functions of RBI**

Along with the routine traditional functions, central banks especially in the developing country like India have to perform numerous functions. These functions are country specific functions and can change according to the requirements of that country. The RBI has been performing as a promoter of the financial system since its inception. Some of the major development functions of the RBI are maintained below.

1. **Development of the Financial System :** The financial system comprises the financial institutions, financial markets and financial instruments. The sound and efficient financial system is a precondition of the rapid economic development of the nation. The RBI has encouraged establishment of main banking and non-banking institutions to cater to the credit requirements of diverse sectors of the economy.
2. **Development of Agriculture :** In an agrarian economy like ours, the RBI has to provide special attention for the credit need of agriculture and allied activities. It has successfully rendered service in this direction by increasing the flow of credit to this sector. It has earlier the Agriculture Refinance and Development Corporation (ARDC) to look after the credit, National Bank for Agriculture and Rural Development (NABARD) and Regional Rural Banks (RRBs).
3. **Provision of Industrial Finance :** Rapid industrial growth is the key to faster economic development. In this regard, the adequate and timely availability of credit to small, medium and large industry is very significant. In this regard the RBI has always been instrumental in setting up special financial institutions such as ICICI Ltd. IDBI, SIDBI and EXIM BANK etc.
4. **Provisions of Training :** The RBI has always tried to provide essential training to the staff of the banking industry. The RBI has set up the bankers' training colleges at several places. National Institute of Bank Management i.e NIBM, Bankers Staff College i.e BSC and College of Agriculture Banking i.e CAB are few to mention.

5. **Collection of Data :** Being the apex monetary authority of the country, the RBI collects process and disseminates statistical data on several topics. It includes interest rate, inflation, savings and investments etc. This data proves to be quite useful for researchers and policy makers.
6. **Publication of the Reports :** The Reserve Bank has its separate publication division. This division collects and publishes data on several sectors of the economy. The reports and bulletins are regularly published by the RBI. It includes RBI weekly reports, RBI Annual Report, Report on Trend and Progress of Commercial Banks India., etc. This information is made available to the public also at cheaper rates.
7. **Promotion of Banking Habits :** As an apex organization, the RBI always tries to promote the banking habits in the country. It institutionalizes savings and takes measures for an expansion of the banking network. It has set up many institutions such as the Deposit Insurance Corporation-1962, UTI-1964, IDBI-1964, NABARD-1982, NHB-1988, etc. These organizations develop and promote banking habits among the people. During economic reforms it has taken many initiatives for encouraging and promoting banking in India.
8. **Promotion of Export through Refinance :** The RBI always tries to encourage the facilities for providing finance for foreign trade especially exports from India. The Export-Import Bank of India (EXIM Bank India) and the Export Credit Guarantee Corporation of India (ECGC) are supported by refinancing their lending for export purpose.

### **Supervisory Functions of RBI**

The reserve bank also performs many supervisory functions. It has authority to regulate and administer the entire banking and financial system. Some of its supervisory functions are given below.

1. **Granting license to banks :** The RBI grants license to banks for carrying its business. License is also given for opening extension counters, new branches, even to close down existing branches.
2. **Bank Inspection :** The RBI grants license to banks working as per the directives and in a prudent manner without undue risk. In addition to this it can ask for periodical information from banks on various components of assets and liabilities.
3. **Control over NBFIs :** The Non-Bank Financial Institutions are not influenced by the working of a monetary policy. However RBI has a right to issue directives to the NBFIs from time to time regarding their functioning. Through periodic inspection, it can control the NBFIs.



4. **Implementation of the Deposit Insurance Scheme :** The RBI has set up the Deposit Insurance Guarantee Corporation in order to protect the deposits of small depositors. All bank deposits below Rs. One lakh are insured with this corporation. The RBI work to implement the Deposit Insurance Scheme in case of a bank failure.

## **Monetary Policy of the RBI**

### **Introduction**

Monetary policy refers to the policy of a Central Bank to systematically regulate the supply of money in the economy with a definite purpose. It comprises of those measures, which aim at regulating the supply of credit in quantity and prices consistent with specific national objectives. It is also known as central banking policy or credit control policy.

### **Definition:**

GK show defines it as, "any conscious action undertaken by the monetary authorities to change the quantity availability or cost of money."

### **Monetary policy in 1952**

The monetary policy since 1952 emphasized the twin aims of the economic policy of the government

- a. To spread up economic development in the country to raise national income and standard of living in India.
- b. To reduce and control inflationary pressure in the economy.

Hence this is called as the controlled expansion policy. Accordingly, the RBI expanded the volume of money and credit and at the same time, attempted to check rise in prices by the use of qualitative methods of credit control.

### **Monetary policy since 1972**

Since 1972, the Indian economy has been working with considerable inflationary potential. This is due to rapid increase in the money supply with the public and the banking institutions. There was a serious inflationary situation in (India) the country. This was caused by frequency fluctuations in agricultural production faulty government policies, global inflationary situation directly due to hike in oil prices, etc. Therefore, the government was forced to abandon the 'controlled expansion policy' and introduce an anti-inflationary policy.

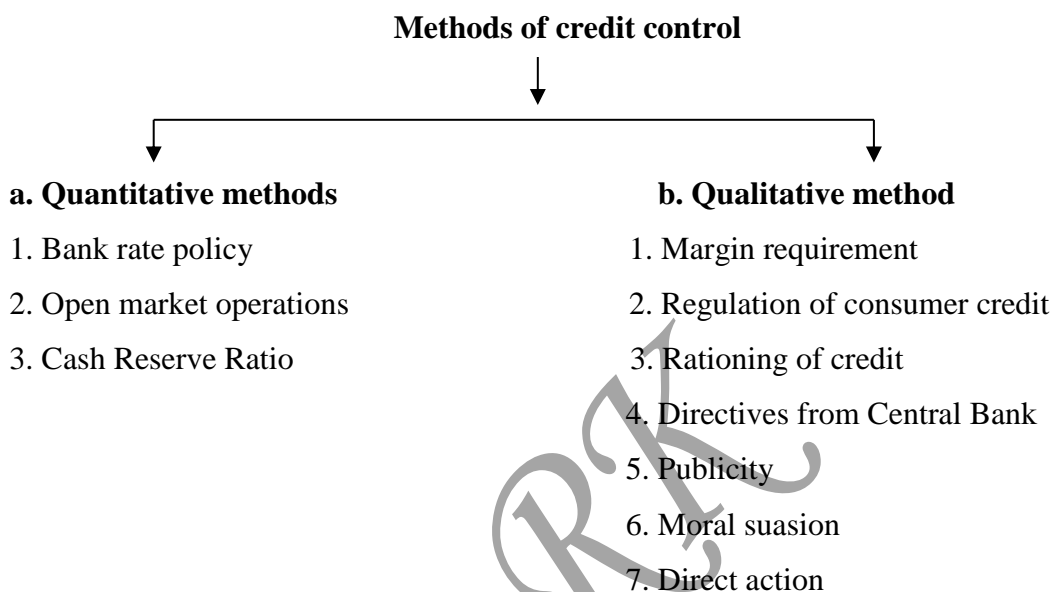


### Objectives of monetary policy

1. Exchange stability
2. Price stability
3. Full employment
4. Economic growth

### Credit control

The central bank adopts two types of methods of credit control. They are quantitative and qualitative methods.



### Quantitative Methods

#### a. The bank rate policy:

Bank rate also known as, discount rate refers the official minimum rate of interest. It is an important quantitative method of credit control. The volume of credit in the country can be controlled by the central bank by making appropriate change in its bank rate. When the volume of bank credit in the country is controlled, inflation and deflation can be controlled.

#### b. Open market operations:

Open market operation is a second device used by the central bank control the volume of bank credit in the country. The term open market operation refers to the purchase and sale of eligible securities by the central bank in bills market. In practice, open market operation consists of buying and selling of bills and securities by the central bank on its own initiative, with a view to expand and contract credit and general economic activity.

**c. Cash reserve ratio:**

This is a more powerful weapon and used only occasionally. According to this method, every commercial bank is required to keep, either by law or by custom, certain percentage of its total deposits with the central bank. This percentage is known as cash reserve ratio.

The volume of credit in the country can be controlled by the central bank by making appropriate change in the cash reserve ratio-control inflation and deflation.

**Qualitative credit control**

The qualitative measures do not regulate the total amount of credit created by the commercial banks. These measures make distinction between good credit and bad credit and regulate only such credit, which creates economic instability. Therefore, qualitative measures are known as the selective measures of credit control.

**1. Margin requirements:**

In times of inflation the central bank will fix the margin requirement at a higher level and control the expansion of the credit by the commercial banks. It leads reduction in investment decrease income and decrease price level. In times of deflation, the central bank will fix the margin-requirement at a lower level and help the expansion of credit by the commercial bank.

**2. Regulation of consumer credit**

A second device of selective credit control is regulation of consumer credit for the purchase of durable consumer goods like radio's, refrigerators, washing machines, TV's etc., such goods are generally purchase by the consumer on installment credit system.. e.g

Inflation time-payment increase  $\frac{1}{2}$

Deflation time-payment decreases  $\frac{1}{4}$

**3. Rationing of credit**

Central bank fixes a ceiling-above the ceiling which loans and advances should not be granted.

- a. When there is inflation, central bank controls the volume of credit.
- b. When there is deflation, the central bank encourages the commercial banks to liberal loans.

**4. Directives from central bank**

The central bank may issue directives to the commercial banks. These directives may be in the form of written order, appeals or warning.

**5. Publicity**

Many central banks adopt publicity as an instrument of credit control.

E.g. publishing regularly the weekly statement of their assets and liabilities, credit and business conditions etc.,

**6. Moral suasion (advise)**

Moral suasion means persuasion and request. To arrest inflationary situation central bank persuades and request the commercial banks to refrain from giving loans for speculative and non-essential purposes. On the other hand, to counteract deflation central bank persuades the commercial banks to extend credit for different purposes.

Central bank also appeals commercial banks to extend their wholehearted co-operation to achieve the objectives of monetary policy. Being the monetary authority directions of the central bank are usually followed by commercial banks.

**7. Direct Action:**

This method is adopted when a commercial bank does not co-operate the central bank in achieving its desirable objectives. Direct action may take any of the following forms:

Central banks may charge a penal rate of interest over and above the bank rate upon the defaulting banks;

Central bank may refuse to rediscount the bills of those banks which are not following its directives;

Central bank may refuse to grant further accommodation to those banks whose borrowings are in excess of their capital and reserves.

**FISCAL POLICY**

The fiscal policy is concerned with the raising of government revenue and incurring of government expenditure. To generate revenue and to incur expenditure, the government frames a policy called budgetary policy or fiscal policy. So, the fiscal policy is concerned with government expenditure and government revenue.

Fiscal policy has to decide on the size and pattern of flow of expenditure from the government to the economy and from the economy back to the government. So, in broad term fiscal policy refers to "that segment of national economic policy which is primarily concerned with the receipts and expenditure of central government."

In other words, fiscal policy refers to the policy of the government with regard to taxation, public expenditure and public borrowings.

Fiscal Policy is different from monetary policy in the sense that monetary policy deals with the supply of money and rate of interest. The government and RBI use these two policies to steer the broad aspects of the Indian Economy. While government conducts Fiscal Policy, RBI is responsible for monetary policy. RBI also helps the government in implementing its fiscal policy decisions.

*Fiscal policy thus is the deliberate change in government spending and taxes to stimulate or slow down the economy. In the words of F.R. Glahe:*

*"By fiscal policy is meant the regulation of the level of government expenditure and taxation to achieve full employment without inflation in the economy".*

*J. M. Keynes describes fiscal policy as the steering wheel for the aggregate economy.*

### **Objectives of Fiscal Policy**

The objectives of the fiscal policy of the government are as follows:

#### **1.Resource Mobilization**

Fiscal policy allows the government to mobilize resources for public expenditure and development. There are three ways of resource mobilization viz. taxation, public savings and private savings through issue of bonds and securities.

#### **2.Resource Allocation**

The funds mobilized under fiscal policy are further allocated for development of social and physical infrastructure. For example, the government collected tax revenues are allocated to various ministries to carry out their schemes for development.

#### **3.Redistribution of Income**

The taxes collected from rich people are spent on social upliftment of the poor and this fiscal policy in a welfare state tried to reduce inequalities of income using resource allocation.

#### **4.Price stability, control of Inflation, Employment generation**

Government uses fiscal measures such as taxation and public expenditure to stabilize the prices and control inflation. Government also generates employment by speeding infrastructure development.

#### **5.Balanced Regional Development**

A large part of the government tax revenues are given out to less developed states as statutory and discretionary grant. This helps in the balanced regional development of the country.

#### **6.Balance of Payments**

Using fiscal policy measures government tries to promote exports to earn foreign exchange. This helps in maintaining favourable balance of trade and balance of payments.

## **7.Capital Formation and National Income**

Fiscal policy measures help in increasing the capital formation and economic growth. Increased capital formation leads to increase in national income

### **COMPONENTS OF FISCAL POLICY**

There are four key components of Fiscal Policy are as follows:

- Taxation Policy
- Expenditure Policy
- Investment & Disinvestment policy
- Debt / surplus management.

#### **Taxation Policy**

We have already discussed in detail about the taxation policy in previous module. The government gets revenue from direct and indirect taxes. Via its fiscal policy, government aims to keep the taxes as much progressive as possible. Further, judicious taxation decisions are very important for economy because of two reasons:

- Higher than usual tax rate will reduce the purchasing power of people and will lead to an decrease in investment and production.
- Lower than usual tax rates would leave more money with people to spend and this would lead to inflation.

Thus, the government has to make a balance and impose correct tax rate for the economy.

#### **Expenditure Policy**

Expenditure policy of the government deals with revenue and capital expenditures. These expenditures are done on areas of development like education, health, infrastructure etc. and to pay internal and external debt and interest on those debts. Government budget is the most important instrument embodying expenditure policy of the government. The budget is also used for deficit financing i.e. filling the gap between Government spending and income.

#### **Investment and Disinvestment Policy**

Optimum levels of domestic as well as foreign investment are needed to maintain the economic growth. In recent years, the importance of FDI has increased dramatically and has become an instrument of integrating the domestic economies with global economy.

**Debt / Surplus Management**

If the government received more than it spends, it is called surplus. If government spends more than income, then it is called deficit. To fund the deficit, the government has to borrow from domestic or foreign sources. It can also print money for deficit financing.

**Difference between Fiscal Policy and Monetary Policy**

<b>BASIS FOR COMPARISON</b>	<b>FISCAL POLICY</b>	<b>MONETARY POLICY</b>
<b>Meaning</b>	The tool used by the government in which it uses its tax revenue and expenditure policies to affect the economy is known as Fiscal Policy.	The tool used by the central bank to regulate the money supply in the economy is known as Monetary Policy.
<b>Administered by</b>	Ministry of Finance	Central Bank
<b>Nature</b>	The fiscal policy changes every year.	The change in monetary policy depends on the economic status of the nation.
<b>Related to</b>	Government Revenue & Expenditure	Banks & Credit Control
<b>Focuses on</b>	Economic Growth	Economic Stability
<b>Policy instruments</b>	Tax rates and government spending	Interest rates and credit ratios
<b>Political influence</b>	Yes	No

**Economic Growth**

Economic Growth refers to the rise in the value of everything produced in the economy. It implies the yearly increase in the country's GDP or GNP, in percentage terms. It alludes to considerable rise in per-capita national product, over a period, i.e. the growth rate of increase in total output, must be greater than the population growth rate.

Economic Growth is often contrasted with Economic Development, which is defined as the increase in the economic wealth of a country or a particular area, for the welfare of its residents. Here, you should know that economic growth is an essential but not the only condition for economic development.

**Difference between Economic Growth and Economic Development**

<b>BASIS FOR COMPARISON</b>	<b>ECONOMIC GROWTH</b>	<b>ECONOMIC DEVELOPMENT</b>
Meaning	Economic Growth is the positive change in the real output of the country in a particular span of time.	Economic Development involves rise in the level of production in an economy along with the advancement of technology, improvement in living standards and so on.
Concept	Narrow	Broad
Scope	Increase in the indicators like GDP, per capita income etc.	Improvement in life expectancy rate, infant mortality rate, literacy rate and poverty rates.
Term	Short term process	Long term process
Applicable to	Developed Economies	Developing Economies
How it can be measured?	Upward movement in national income.	Upward movement in real national income.
Which kind of changes are expected?	Quantitative changes	Qualitative and quantitative changes
Type of process	Automatic	Manual
When it arises?	In a certain period of time.	Continuous process.

### Factors affecting Economic Growth

Economic growth is an increase in real GDP; it means an increase in the value of goods and services produced in an economy.

The rate of economic growth is the annual percentage increase in real GDP.

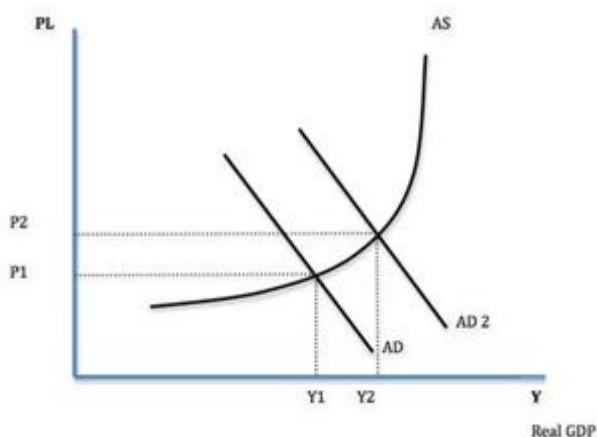
There are several factors affecting economic growth, but it is helpful to split them up into:

- Demand side factors (e.g. consumer spending)
- Supply side factors (e.g. productive capacity)

### Demand side factors – Aggregate Demand (AD)

$$AD = C + I + G + X - M.$$

Therefore a rise in Consumption, Investment, Government spending or exports can lead to higher AD and higher economic growth.



### What could affect AD?

1. **Interest rates.** Lower interest rates would make borrowing cheaper and should encourage firms to invest and consumers to spend. People with mortgages will have lower monthly mortgage payments so more disposable income to spend. However, 2009-16 we had a period of very low interest rates, but due to low confidence and reluctant bank lending, economic growth was still slow.
2. **Consumer confidence.** Consumer and business confidence is very important for determining economic growth. If consumers are confident about the future they will be encouraged to borrow and spend. If they are pessimistic they will save and reduce spending.

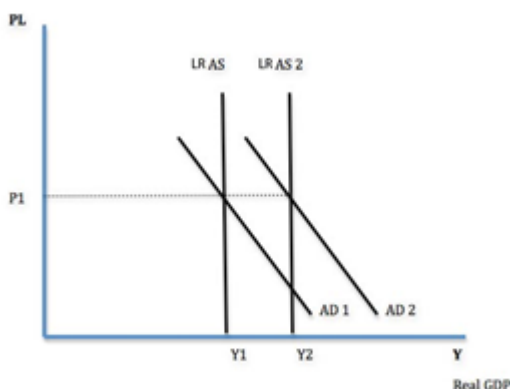


3. **Asset prices.** Rising house prices create a positive wealth effect. People can re-mortgage against the rising value of their home and this encourages more consumer spending. House prices are an important factor in the UK, because so many people are homeowners.
4. **Real wages.** Recently, the UK has experienced a situation of falling real wages. Inflation has been higher than nominal wage, causing a decline in real incomes. In this situation, consumers will have to cut back on spending – in particular reducing their purchase of luxury items.
5. **Value of exchange rate.** If the Pound devalued, exports would become more competitive and imports more expensive. This would help to increase demand for domestic goods and services. A depreciation could cause inflation, but in the short term at least it can provide a boost to growth.
6. **Banking sector.** The 2008 Credit crunch showed how influential the banking sector can be in determining investment and growth. If the banks lose money and no longer want to lend, it can make it very difficult for firms and consumers leading to a decline in investment.

### Long Run Aggregate Supply

In the long run, economic growth is determined by factors which influence the growth of Long Run Aggregate Supply (the PPF of the economy). If there is no increase in LRAS, then a rise in AD will just be inflationary.

This graph shows an increase in LRAS and AD, leading to an increase in economic growth without inflation.



### LRAS can be influenced by

**1. Levels of infrastructure.** Investment in roads, transport and communication can help firms reduce costs and expand production. Without necessary infrastructure it can be difficult for firms to

be competitive in the international markets. This lack of infrastructure is often a factor holding back some developing economies.

**2.Human capital.** Human capital is the productivity of workers. This will be determined by levels of education, training and motivation. Increased labour productivity can help firms take on more sophisticated production processes and become more efficient.

**3.Development of technology.** In the long run development of new technology is a key factor in enabling improved productivity and higher economic growth.

**4.Strength of labour markets.** If labour markets are flexible, then firms will find it easier to hire the workers they need. This will make expansion easier. Highly regulated markets could discourage firms from hiring in the first place.

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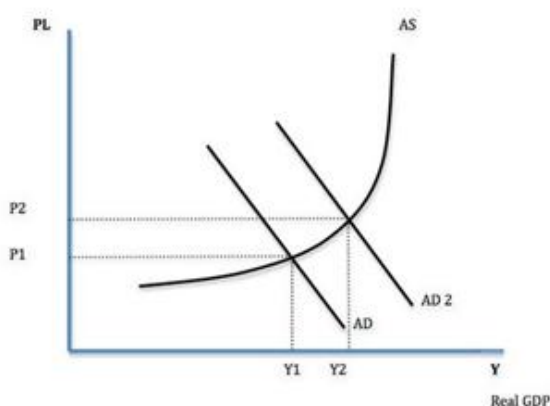
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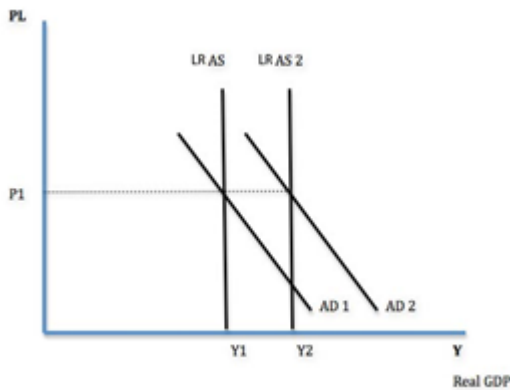
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## **Inflation**

Inflation refers to a continuous rise in general price level which reduces the value of money or purchasing power over a period of time.

### **Definition of Inflation**

According to Crowther, "**Inflation is a state in which the value of money is falling i.e. the prices are rising.**"

According to Coulbourn, "**Inflation is too much of money chasing too few goods.**"

### **Features of Inflation**

The characteristics or features of inflation are as follows :-

1. Inflation involves a process of the persistent rise in prices. It involves rising trend in price level.
2. Inflation is a state of disequilibrium.
3. Inflation is scarcity oriented.
4. Inflation is dynamic in nature.
5. Inflationary price rise is persistent and irreversible.
6. Inflation is caused by excess demand in relation to supply of all types of goods and services.
7. Inflation is a purely monetary phenomenon.
8. Inflation is a post full employment phenomenon.
9. Inflation is a long-term process.

### **Measures to Control Inflation**

Inflation is caused by the failure of aggregate supply to equal the increase in aggregate demand. Inflation can, therefore, be controlled by increasing the supplies of goods and services and reducing money incomes in order to control aggregate demand.

The various methods are usually grouped under three heads: monetary measures, fiscal measures and other measures.

#### **1. Monetary Measures:**

Monetary measures aim at reducing money incomes.

##### **(a) Credit Control:**

One of the important monetary measures is monetary policy. The central bank of the country adopts a number of methods to control the quantity and quality of credit. For this purpose, it raises the

bank rates, sells securities in the open market, raises the reserve ratio, and adopts a number of selective credit control measures, such as raising margin requirements and regulating consumer credit. Monetary policy may not be effective in controlling inflation, if inflation is due to cost-push factors. Monetary policy can only be helpful in controlling inflation due to demand-pull factors.

**(b) Demonetisation of Currency:**

However, one of the monetary measures is to demonetise currency of higher denominations. Such a measure is usually adopted when there is abundance of black money in the country.

**(c) Issue of New Currency:**

The most extreme monetary measure is the issue of new currency in place of the old currency. Under this system, one new note is exchanged for a number of notes of the old currency. The value of bank deposits is also fixed accordingly. Such a measure is adopted when there is an excessive issue of notes and there is hyperinflation in the country. It is a very effective measure. But it is inequitable for it hurts the small depositors the most.

**2. Fiscal Measures:**

Monetary policy alone is incapable of controlling inflation. It should, therefore, be supplemented by fiscal measures. Fiscal measures are highly effective for controlling government expenditure, personal consumption expenditure, and private and public investment.

**The principal fiscal measures are the following:**

**(a) Reduction in Unnecessary Expenditure:**

The government should reduce unnecessary expenditure on non-development activities in order to curb inflation. This will also put a check on private expenditure which is dependent upon government demand for goods and services. But it is not easy to cut government expenditure. Though this measure is always welcome but it becomes difficult to distinguish between essential and non-essential expenditure. Therefore, this measure should be supplemented by taxation.

**(b) Increase in Taxes:**

To cut personal consumption expenditure, the rates of personal, corporate and commodity taxes should be raised and even new taxes should be levied, but the rates of taxes should not be so high as to discourage saving, investment and production. Rather, the tax system should provide larger incentives to those who save, invest and produce more.

Further, to bring more revenue into the tax-net, the government should penalise the tax evaders by imposing heavy fines. Such measures are bound to be effective in controlling inflation. To increase the supply of goods within the country, the government should reduce import duties and increase export duties.

### **(c) Increase in Savings:**

Another measure is to increase savings on the part of the people. This will tend to reduce disposable income with the people, and hence personal consumption expenditure. But due to the rising cost of living, people are not in a position to save much voluntarily.

### **(d) Surplus Budgets:**

An important measure is to adopt anti-inflationary budgetary policy. For this purpose, the government should give up deficit financing and instead have surplus budgets. It means collecting more in revenues and spending less.

### **(e) Public Debt:**

At the same time, it should stop repayment of public debt and postpone it to some future date till inflationary pressures are controlled within the economy. Instead, the government should borrow more to reduce money supply with the public.

Like monetary measures, fiscal measures alone cannot help in controlling inflation. They should be supplemented by monetary, non-monetary and non-fiscal measures.

## **3. Other Measures:**

The other types of measures are those which aim at increasing aggregate supply and reducing aggregate demand directly.

### **(a) To Increase Production:**

The following measures should be adopted to increase production:

- (i) One of the foremost measures to control inflation is to increase the production of essential consumer goods like food, clothing, kerosene oil, sugar, vegetable oils, etc.
- (ii) If there is need, raw materials for such products may be imported on preferential basis to increase the production of essential commodities,
- (iii) Efforts should also be made to increase productivity. For this purpose, industrial peace should be maintained through agreements with trade unions, binding them not to resort to strikes for some time,
- (iv) The policy of rationalisation of industries should be adopted as a long-term measure. Rationalisation increases productivity and production of industries through the use of brain, brawn and bullion,



(v) All possible help in the form of latest technology, raw materials, financial help, subsidies, etc. should be provided to different consumer goods sectors to increase production.

### **(b) Rational Wage Policy:**

Another important measure is to adopt a rational wage and income policy. Under hyperinflation, there is a wage-price spiral. To control this, the government should freeze wages, incomes, profits, dividends, bonus, etc.

But such a drastic measure can only be adopted for a short period as it is likely to antagonise both workers and industrialists. Therefore, the best course is to link increase in wages to increase in productivity. This will have a dual effect. It will control wages and at the same time increase productivity, and hence raise production of goods in the economy.

### **(c) Price Control:**

Price control and rationing is another measure of direct control to check inflation. Price control means fixing an upper limit for the prices of essential consumer goods. They are the maximum prices fixed by law and anybody charging more than these prices is punished by law. But it is difficult to administer price control.

### **(d) Rationing:**

Rationing aims at distributing consumption of scarce goods so as to make them available to a large number of consumers. It is applied to essential consumer goods such as wheat, rice, sugar, kerosene oil, etc. It is meant to stabilise the prices of necessities and assure distributive justice. But it is very inconvenient for consumers because it leads to queues, artificial shortages, corruption and black marketing. Keynes did not favour rationing for it “involves a great deal of waste, both of resources and of employment.”

### **Conclusion:**

From the various monetary, fiscal and other measures discussed above, it becomes clear that to control inflation, the government should adopt all measures simultaneously. Inflation is like a hydra-headed monster which should be fought by using all the weapons at the command of the government.

## **DEFLATION**

Deflation occurs when the general prices of goods and services of an economy falls for a significant period of time. In other words, your money becomes worth more and you can buy more goods and service with it than before. The opposite of deflation is inflation, where the general prices of goods and service in an economy increase and your money is worth less than before.

**Definition:** When the overall price level decreases so that inflation rate becomes negative, it is called deflation. It is the opposite of the often-encountered inflation. **Description:** A reduction in money supply or credit availability is the reason for deflation in most cases.

### **Measures to control Deflation**

To fight deflation, attempts must be made to raise the volume of aggregate effective demand. It will output, income and employment in the economy, Effective demand can be increased partly by consumption expenditure and partly by increasing investment expenditure. Various measures to increase consumption and investment expenditures in the economy.

#### **1. Reduction in Taxation:**

The government should reduce the number and burden of various taxes levied on commodities. This will increase the purchasing power of the people. As a result, the demand for goods and services will increase. Moreover, sufficient tax relief should be given to businessmen to encourage investment.

#### **2. Redistribution of Income:**

Marginal propensity to consume can be raised by a redistribution of income and wealth from the rich to the poor. Since the marginal propensity to consume of the poor is high and that of the rich is low, such a measure will help increasing the aggregate demand in the economy.

#### **3. Repayment of Public Debt:**

During deflation period, the government can repay the old public debts. This will increase the purchasing power of the people and push up effective demand.

#### **4. Subsidies:**

The government should give subsidies to induce the businessmen to increase investment.

#### **5. Public Works Programme:**

The government should also directly undertake public works programme and thus increase expenditure in public sector. Care should, however, be taken that the public works policy of the government does not adversely affect investment in the private sector; it should supplement, and

not supplant, private investment. For this, it is important that only those projects should be selected for the government's public works policy, which is either too big or not so profitable to attract private investment.

**6. Deficit Financing:**

In order to have significant expansionary effects, the government's public works schemes should be financed by the method of deficit financing, i.e., by printing new money. The government should adopt a budgetary deficit (excess of government expenditure over its revenue) and cover this deficit through deficit financing. Deficit financing makes available to the government sufficient resources for its developmental programmes without adversely affecting investment in the private sector.

**7. Reduction in Interest Rate:**

By adopting a cheap money policy, the monetary authority of a country reduced the interest rate, which stimulates investment and thereby expands economic activity in the economy.

**8. Credit Expansion:**

The central bank and the commercial banks should adopt a policy of credit expansion to promote business and industry in the country. Bank credit should be made easily available to the entrepreneurs for productive purposes.

**9. Foreign Trade Policy:**

To control deflation, the government should adopt such a foreign trade policy that, on the one hand, increases exports, and, on the other hand, reduces imports. This kind of policy will go a long way in solving the problem of overproduction, and help overcoming deflation.

**10. Regulation of Production:**

Production in the economy should be regulated in such a way that the problem of over-production does not arise. Attempts should be made to adjust production with the existing demand to avoid over-production.

In short, fiscal policy alone or monetary policy alone is not sufficient to check deflation in an economy. A proper co- ordination of fiscal, monetary and other measures is essential to effectively deal with the deflation-ary situation.

**BUSINESS CYCLE (or) TRADE CYCLE**

**INTRODUCTION**

The economic activity of a nation will have its periodic ups & downs & they play an important role in determining the long run trend which similarly plays an important role in determining the nature & length of the ups & downs. The study of these ups & downs is called the study of business cycle. The recurring and fluctuating levels of economic activity that an economy experiences over a long period of time. The five stages of the business cycle are growth (expansion), peak, recession (contraction), trough and recovery. At one time, business cycles were thought to be extremely regular, with predictable durations, but today they are widely believed to be irregular, varying in frequency, magnitude and duration.

**DEFINITIONS**

According to Haberler, the business cycle in general sense may be defined as alteration of periods of prosperity & depression of good & bad trade.

According to J. M. Keynes, a trade cycle is composed of periods of good trade characterized by rising prices, low unemployment alternation C the periods bad trade characterized b falling prices & high unemployment's.

**Characteristics of Business cycle**

**1. It occurs periodically:-**

The business cycle occurs periodically in a regular interval. This means the prosperity & depression will be occurring alternatively. A trade cycle may occur once in 30 or 40 years.

**2. It is all embracing :-**

The business cycle implies that the prosperity & depressionary effect of the stage will be affecting all industries in the entire economy & also affecting the economies of other countries.

**3. It is wave like:-**

There are upward swings & downwards swings like waves in the sea. Rising prices, employment, production & income are the features of the upward swings while falling price, unemployment, production & income etc, are the features of downward swings.

**4. The process is cumulative;-**

The upward movement & downward movement are cumulative in their process. When once the upward in the same direction & viz versa.

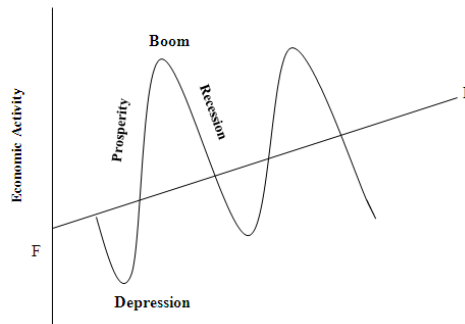
**5. Cycles are similar but not identical:-**

The common characteristics of business cycles will be same but they differ in intensity.

### Phases of a Business Cycle:-

Business cycle is characterized by five different stages, they are:-

1. Depression
2. Recovery (or) revival
3. Prosperity (full employment)
4. Boom (over full employment)
5. Recession



The business cycle starts from a trough (lower point) and passes through a recovery phase followed by a period of expansion (upper turning point) and prosperity. After the peak point is reached there is a declining phase of recession followed by a depression. Again the business cycle continues similarly with ups and downs

### 1. Prosperity Phase

When there is an expansion of output, income, employment, prices and profits, there is also a rise in the standard of living. This period is termed as Prosperity phase.

The **features of prosperity** are :-

1. High level of output and trade.
2. High level of effective demand.
3. High level of income and employment.
4. Rising interest rates.
5. Inflation.
6. Large expansion of bank credit.
7. Overall business optimism.
8. A high level of MEC (Marginal efficiency of capital) and investment.

Due to full employment of resources, the level of production is Maximum and there is a rise in **GNP** (Gross National Product). Due to a high level of economic activity, it causes a rise in prices and profits. There is an upswing in the economic activity and economy reaches its **Peak**. This is also called as a **Boom Period**.

### **2. Recession Phase**

The turning point from prosperity to depression is termed as Recession Phase. During a recession period, the economic activities slow down. When demand starts falling, the overproduction and future investment plans are also given up. There is a steady decline in the output, income, employment, prices and profits. The businessmen lose confidence and become pessimistic (Negative). It reduces investment. The banks and the people try to get greater liquidity, so credit also contracts. Expansion of business stops, stock market falls. Orders are cancelled and people start losing their jobs. The increase in unemployment causes a sharp decline in income and aggregate demand. Generally, recession lasts for a short period.

### **3. Depression Phase**

When there is a continuous decrease of output, income, employment, prices and profits, there is a fall in the standard of living and depression sets in.

The **features of depression** are :-

1. Fall in volume of output and trade.
2. Fall in income and rise in unemployment.
3. Decline in consumption and demand.
4. Fall in interest rate.
5. Deflation.
6. Contraction of bank credit.
7. Overall business pessimism.
8. Fall in MEC (Marginal efficiency of capital) and investment.

In depression, there is under-utilization of resources and fall in GNP (Gross National Product). The aggregate economic activity is at the lowest, causing a decline in prices and profits until the economy reaches its **Trough** (low point).

### **4. Recovery Phase**

The turning point from depression to expansion is termed as Recovery or **Revival** Phase. During the period of revival or recovery, there are expansions and rise in economic activities. When demand starts rising, production increases and this causes an increase in investment. There is a steady rise in output, income, employment, prices and profits. The businessmen gain confidence and become optimistic (Positive). This increases investments. The stimulation of investment brings about the revival or recovery of the economy. The banks expand credit, business expansion takes place and stock markets are activated. There is an increase in employment, production, income and

aggregate demand, prices and profits start rising, and business expands. Revival slowly emerges into prosperity, and the business cycle is repeated.

Thus we see that, during the expansionary or prosperity phase, there is inflation and during the contraction or depression phase, there is a deflation.

### **Measures to Control Business Cycles or Stabilisation Policies:**

Various measures have been suggested and put into practice from time to time to control fluctuations in an economy. They aim at stabilising economic activity so as to avoid the ill-effects of a boom and a depression. The following three measures are adopted for this purpose.

#### **1. Monetary Policy:**

Monetary policy as a method to control business fluctuations is operated by the central bank of a country. The central bank adopts a number of methods to control the quantity and quality of credit. To control the expansion of money supply during a boom, it raises its bank rate, sells securities in the open market, raises the reserve ratio, and adopts a number of selective credit control measures such as raising margin requirements and regulating consumer credit. Thus the central bank adopts a dear money policy. Borrowings by business and trade become dearer, difficult and selective. Efforts are made to control excess money supply in the economy.

To control a recession or depression, the central bank follows an easy or cheap monetary policy by increasing the reserves of commercial banks. It reduces the bank rate and interest rates of banks. It buys securities in the open market. It lowers margin requirements on loans and encourages banks to lend more to consumers, businessmen, traders, etc.

#### **Limitations of Monetary Policy:**

But monetary policy is not so effective as to control a boom and a depression. If the boom is due to cost- push factors, it may not be effective in controlling inflation, aggregate demand, output, income and employment. So far as depression is concerned, the experience of the Great Depression of 1930s tells us that when there is pessimism among businessmen, the success of monetary policy is practically nil.

In such a situation, they do not have any inclination to borrow even when the interest rate is very low. Similarly, consumers who are faced with reduced incomes and unemployment cut down their

consumption expenditure. Neither the central bank nor the commercial banks are able to induce businessmen and consumers to raise the aggregate demand. Thus the success of monetary policy to control economic fluctuations is severely limited.

### **2. Fiscal Policy:**

Monetary policy alone is not capable of controlling business cycles. It should, therefore, be supplemented by compensatory fiscal policy. Fiscal measures are highly effective for controlling excessive government expenditure, personal consumption expenditure, and private and public investment during a boom. On the other hand, they help in increasing government expenditure, personal consumption expenditure and private and public investment during a depression.

#### **Policy during Boom:**

The following measures are adopted during a boom. During a boom, the government tries to reduce unnecessary expenditure on non-development activities in order to reduce its demand for goods and services. This also puts a check on private expenditure which is dependent on the government demand for goods and services. But it is difficult to cut government expenditure. Moreover, it is not possible to distinguish between essential and non-essential government expenditure. Therefore, this measure is supplemented by taxation.

To cut personal expenditure, the government raises the rates of personal, corporate and commodity taxes.

The government also follows the policy of having a surplus budget when the government revenues exceed expenditures. This is done by increasing the tax rates or reduction in government expenditure or both. This tends to reduce income and aggregate demand through the reverse operation of the multiplier.

Another fiscal measure which is usually adopted is to borrow more from the public which has the effect of reducing the money supply with the public. Further, the repayment of public debt should be stopped and postponed to some future date when the economy stabilises.



### **Policy during Depression:**

During a depression, the government increases public expenditure, reduces taxes and adopts a budget deficit policy. These measures tend to raise aggregate demand, output, income, employment and prices. An increase in public expenditure increases the aggregate demand for goods and services and leads to increase in income via the multiplier. The public expenditure is made on such public works as roads, canals, dams, parks, schools, hospitals and other construction works.

They create demand for labour and the products of private construction industries and helps in reviving them. The government also increases its expenditure on such relief measures as unemployment insurance, and other social security measures in order to stimulate the demand for consumer goods industries. Borrowing by the government to finance budget deficits utilizes idle money lying with the banks and financial institutions for investment purposes.

### **Conclusion:**

The effectiveness of anti-cyclical fiscal policy depends upon proper timing of policy action and the nature and volume of public works and their planning.

### **3. Direct Controls:**

The aim of direct controls is to ensure proper allocation of resources for the purpose of price stability. They are meant to affect strategic points of the economy. They affect particular consumers and producers. They are in the form of rationing licensing, price and wage controls, export duties, exchange controls, quotas, monopoly control, etc.

They are more effective in overcoming bottlenecks and shortages arising from inflationary pressures. Their success depends on the existence of an efficient and honest administration. Otherwise, they lead to black marketing, corruption, long queues, speculation, etc. Therefore, they should be resorted to only in emergencies like war, crop failures and hyper-inflation.

### **Conclusions:**

Since cyclical fluctuations are inherent in the capitalist system, they cannot be eliminated completely. Some fluctuations may be beneficial for economic growth and others may be undesirable. Stabilisation policy should, therefore, control undesirable fluctuations.

We conclude with Keynes, “The right remedy for the trade cycles is not to be found in abolishing booms and thus keeping us permanently in a semi-slump; but in abolishing slumps and thus keeping us permanently in a quasi-boom.”

### **Economic stability**

Economic stability refers to an absence of excessive fluctuations in the macro economy. An economy with fairly constant output growth and low and stable inflation would be considered economically stable.

### **POLICIES FOR STABILISATION AND GROWTH**

Economic stability enables other macro-economic objectives to be achieved, such as stable prices and stable and sustainable growth. It also creates the right environment for job creation and a balance of payments. This is largely because stability creates certainty and confidence and this encourages investment in technology and human capital.

Unfortunately, an unintended consequence of globalisation is the increased likelihood of economic shocks, including supply side shocks like oil and commodity price shocks, and demand side shocks like the credit crunch.

### **Policies to promote stability**

#### **Fiscal stabilizers**

Built-in automatic fiscal stabilisers, which include progressive taxes and escalating welfare payments, provide a shock absorber to stabilise an economy following an economic shock. The combined effect of these is to create fiscal drag during periods of unusually strong growth, and fiscal boost during periods of very weak growth or negative growth. Negative or positive demand side shocks can be stabilised more quickly when automatic stabilisers are built-in to the tax-benefit system.

#### **Floating exchange rates**

Floating exchange rates are also seen as an automatic stabiliser. In the event of either a negative demand or supply side shock affecting an economy, the exchange rate will fall as currency traders sell the currency, leading to a fall in export prices and an automatic increase in competitiveness.

Assuming foreign demand is price elastic, export revenue will rise, and, via an upward multiplier effect, aggregate demand will bounce back.

### **Flexible labour markets**

The third automatic stabiliser is flexible labour markets. In the events of a demand side shock, like the credit crunch, aggregate demand will fall and firms will experience a fall in demand for their products. If the labour market is inflexible, full-time workers may be made redundant, and their spending will fall. Assuming a downward multiplier effect, national income will fall further, and the economy may plunge into a recession. However, with a more flexible labour market, a number of flexible responses can occur, which stabilise the economy. For example, instead of making workers redundant, pay can be reduced so that unemployment is avoided. In addition, full-time workers can go part-time, again avoiding full-blown unemployment. Finally, a more flexible and mobile workforce can move quickly from areas or industries with low demand to areas or industries with higher demand.

### **MONETARY POLICY**

In addition to these automatic stabilisers, short-term stability can be maintained by altering monetary conditions, such as raising or lowering interest rates, or by expanding or contracting the money supply. Most national economies and monetary unions review monetary policy on an ongoing monthly basis.

### **More on monetary policies**

#### **Policies to promote sustainable growth**

Sustainable economic growth occurs because of increases in aggregate demand and supply. However, long-term sustainable growth ultimately depends on supply-side improvements because balance of payments and inflationary problems are less likely when the productivity of factors improves. Policies to promote growth include:

#### **Technology policy**

Technology policy refers to policies where government provides incentives for private firms to invest into new technology. These incentives could be in the form of grants, cheap loans, or tax relief.

### **Human capital development**

Investment in human capital by allocating more resources to education and training is widely regarded as critical to the success of developing and developed economies. Human capital development provides key skills and knowledge to enable increases in productivity and efficiency.

### **Reducing red-tape and de-regulation**

A key driver of growth for both developed and developing countries is FDI, and this can be encouraged by reducing red tape and unnecessary regulation, and opening up markets to overseas investors.

### **Providing incentives**

National governments can provide incentives for individuals to start their own business and for small businesses to expand.

### **Tax reform**

Redesigning the tax and benefit system to increase the labour activity rate and encourage work and discourage idleness is clearly an important option for countries wishing to improve their supply-side performance.

### **Increasing competitiveness and contestability**

Another important stimulus to supply-side growth is to increase the degree of competitiveness in the micro-economy by promoting contestability, reducing barriers to entry, and by deregulating markets to encourage new entrants.

### **New markets**

Sustainability can also be achieved by encouraging the formation of new markets which exploit new technology or new trading methods. The newly emerging markets for waste and carbon credits, and the development of carbon offsetting schemes, are recent examples of how new markets can emerge, with or without government support.

### **Infrastructure**

Long-term development of infrastructure projects is also central to the promotion of long term growth and development in a globalised environment. Better infrastructure enables output to be transported at lower cost, as well as generating jobs and other positive externalities.