

## **DJH2C - GENERAL ECONOMICS**

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# UNIT I

## SCOPE AND METHODS OF ECONOMICS

### SCOPE OF ECONOMICS

Like its nature, the scope of economics is a vexed question and economists differ widely in their views. The reason is aptly put by Marshall in one of his letters to Lord Keynes: "It is true of almost every science that, the longer one studies it, the larger its scope seems to be: though in fact its scope may have remained almost unchanged. But the subject matter of economics grows apace. The continuous growth in the subject matter of economics has led to divergent views about the scope of economics.

(1) Subject Matter. Broadly speaking, the formulation of a definition is a succinct procedure of elucidating the subject matter. As discussed in detail above, the majority of economic thinkers from Adam Smith to Pigou have defined the subject matter of economics as the study of the causes of material welfare or as the science of wealth. Marshall, in particular, confined it to the consumption, production, exchange and distribution of wealth by men engaged in the ordinary business of life. Men who are rational beings and act under the existing social, legal and institutional set-up.

Professor Robbins, however, finds this subject matter as too restricted in scope to embrace all the facts. He cites numerous examples to show that certain human activities possess a definite economic significance but have little or no connection with material welfare.

Robbins is, therefore, of the view that for a good or service to have economic significance it must command a price. And for a good or service to command a price, it is not essential that it must promote material welfare, rather it must be scarce and capable of being put to alternative uses. Thus economics is not concerned so much with the analysis of the consumption, production, exchange and distribution of wealth as with a special aspect of human behavior-that of allocating scarce means among competing ends.

(2) Science or Art? Science is a systematized body of knowledge ascertainable by observation and experiment. It is a body of generalizations, principles, theories or laws which traces out a causal relationship between cause and effect. Economics is, in this sense, a science. For it has generalizations which establish relationship between cause and effect. A definite result is expected to follow from a particular cause in economics like all other sciences. But certain economists do not accord economics the status of a science as its laws

do not possess universal validity and are incapable of exact quantitative measurement. Economic phenomena are very complex as they relate to man who acts according to his will.

Art is the practical application of scientific principles. Science lays down certain principles while art puts these principles into practical use. To analyze the causes and effects of poverty falls within the purview of science and to lay down precepts for the removal of poverty is art. Economics is thus both a science and an art in this sense. However, certain economists do not consider it advisable to treat economics as both a science and an art.

(3) Positive and Normative Science. It was Professor Robbins who brought into sharp focus the controversy as to whether economics is a positive or a normative science. A positive science is concerned with 'what is' and a normative science with 'what ought to be'. The former is a pure science, while the latter is an ethical science.

Robbins regards economics as a pure science of what is, which is not concerned with moral or ethical questions. Economics is neutral between ends. The economist has no right to pass judgment on the wisdom or folly of the ends itself. Robbins regards the propositions involving the verb ought as different in kind from proposition involving the verb is.

Thus economics is a positive rather than a normative science. It seeks to explain what actually happens and not what ought to happen. This view was held even by the nineteenth century economists.

### **Conclusion**

We may thus conclude that economics is not only a positive science of what is but also a normative science of what ought to be. The true scope of economics includes the study of the problems of consumption, production, exchange and distribution of wealth, as well as the determination of the values of goods and services, the volume of employment and the determinants of economic growth. Besides, it includes the study of the causes of poverty, unemployment, underdevelopment, inflation, etc. and steps for their removal.

### **INTRODUCTION**

The main purpose of this chapter is to study the methodology of economics. Like scientists, economists are engaged in investigating economic phenomena following almost similar procedures. As methods of study they also make use of deduction and induction. But the generalizations being formulated by them are quite distinct from other sciences. We analyze these problems below.

### **SCIENTIFIC METHOD**

Scientific method is a term used to explain the processes and steps by which a science is built. It is a method to find out and establish facts and stable beliefs, and to obtain

knowledge that is objective and verifiable. As a matter of fact, scientific method is the process of research. It consists of six steps.

- (1) **Selecting the Problem.** This is the first step in scientific enquiry. Before starting any investigation, the problem must be stated clearly and correctly. It is not possible to collect data without a clear notion of the problem. Even the to be explored may be very wide like poverty, unemployment, inflation, etc., or it may be narrow relating to an industry.
- (2) **Collecting of Data.** The second step is to collect data or facts pertaining to the problem to be explored. If the problem is simple the data can be easily collected. However, complicated problems may require many months of even years to collect the necessary data. This step in scientific method is called descriptive economics.
- (3) **Classification of Data.** After collection, the data are enumerated, analyzed and classified. Classification is a way of knowing things. It is the grouping of data or facts according to their resemblances and differences, and to note comparisons and contrasts.
- (4) **Formation of Hypothesis.** In the process of analysis and classification of data various tentative solutions may occur to the investigator. They are known as hypothesis. Townsend defines a hypothesis as “ a suggested answer to a problem.” These suggestions are likely to arise when the researcher carefully examines the problem he is analysing.
- (5) **Testing of Hypothesis.** The next step in scientific method is the testing of the hypothesis formulated. The hypothesis formulated should be such that deductions can be drawn from it and a decision reached as to whether it explains the facts considered or not. The hypothesis should be tested by well-established techniques of logic and statistics which may then be subjected to experimental confirmation.
- (6) **Verification of Conclusions.** The last step in scientific method is the verification of the hypothesis or theory tested. If the hypothesis turns out to be true, the hypothesis is said to be confirmed or verified. The process of verification may be carried out by observation or by experimentation or by checking the consistency of the hypothesis with related facts that are believed to be true. If a hypothesis is proved to be wrong, it stands rejected.

## **METHODS OF SCIENTIFIC STUDY-DEDUCTIUN AND INDUCTION**

There are two methods of scientific study. They are the deductive and inductive methods. As a matter of fact, deduction and induction are two forms of logic that help to establish the truth.

### **The Deductive Method**

It involves the process of reasoning from certain laws or principles, which are assumed to be true, to the analysis of facts. Then inferences are drawn which are verified

against observed facts. Bacon described deduction as a “descending process” in which we proceed from a general principle to its consequences. Mill characterized it as a priori method, while others called it abstract and analytical.

Deduction involves certain steps: (a) The formulation of assumption on the basis of which the facts are to be analyzed; (b) The process of logical reasoning whereby inferences are drawn. Inference is the process by which we arrive at conclusions from given propositions; (c) The final step relates to the verification of conclusions arrived at. If the conclusions agree with the observed facts, the hypothesis is verified.

**Merits of Deductive Method.** The deductive method has many advantages.

- (1) It is the method of “intellectual experiment”, according to Boulding. Since the actual world is very complicated, “what we do is to postulate in our own minds economic systems which are simpler than reality but more easy to grasp.
- (2) The deductive method is simple because it is analytical. It involves abstraction and simplifies a complex problem by dividing it into component parts.
- (3) It is a powerful method of analysis for deducing conclusions from certain facts.
- (4) The use of mathematics in deduction brings exactness and clarity in economic analysis.
- (5) The use of deductive method is indispensable in sciences like economics where experimentation is not possible.
- (6) The deductive method helps in drawing which are of universal validity because they are based on general principles, such as the law of diminishing returns.

**Demerits of Deductive Method.**

They based their premises on the assumption that self-interest always motivates human behavior. This is obviously not true. Professor Lerner rightly pointed out that the deductive method is simply ‘armchair analysis’ which cannot be regarded as universal.

The deductive method is highly abstract and requires great skill in drawing inferences from various premises. Due to the complexity of certain economic problems, it becomes difficult to apply this method even at the hands of an expert researcher.

Lastly, the chief defect of the deductive method “lies in the fact that those who follow this method may be absorbed in the framing of intellectual toys and the real world may be forgotten in the intellectual gymnastic and mathematical treatment.”

## **The Inductive Method**

Inductive logic involves the process of reasoning from particular facts to general principles. Bacon describes it as “an ascending process” in which we collect facts, arrange and then draw general conclusions.

The inductive method involves four stages: (i) observation; (ii) formation of hypothesis; (iii) generalization; and (iv) verification.

The inductive method was employed in economics by the German historical school which sought to develop economic wholly from historical research. The historical or inductive method expects the economist to be primarily an economic historian who should first collect historical material, draw generalizations, and verify the conclusion by applying them to subsequent events. For this it uses statistical methods. The Engel’s Law of Family Expenditure and the Malthusian Theory of Population have been derived from inductive reasoning.

### **Merits of Inductive Method.**

While the deductive method involves reasoning from the general to the particular, the deductive method proceeds from the particular to the general. It is thus realistic, concrete and synthetic which gives this method a clear edge over the former. The chief merits of this methods of this method are as follows.

- (1)The inductive method is realistic because it is based on facts and explains them as they actually are. It is concrete and synthetic because it deals with the subject as a whole and does not divide it into component parts artificially.
- (2)Induction helps in future enquiries. By discovering and proving general principles, induction helps future investigation.
- (3)The inductive method makes use of the statistical method. This has made significant improvements in the application of induction for analysing economic problems of wide range.
- (4)The inductive method is dynamic. in this, changing economic phenomena can be analyzed on the basis of experiences, conclusions can be drawn and appropriate remedial measures can be taken.
- (5)A generalization drawn under the inductive method is often historic-relative in economics. Since it is drawn from a particular historical situation, it cannot be applied to all situations unless they are exactly similar.

### **Demerits of Inductive Methods.**

However, the inductive method is not without its weaknesses which are discussed below.

- (1) Induction relies on statistical numbers for analysis that “can be misused and misinterpreted”.
- (2) Boulding points out that ‘statistical information can only give us propositions whose truth is more or less probable, it can never give us certainty.’
- (3) Definitions, sources and methods used in statistical analysis differ from investigator to investigator even for the same problem.
- (4) The inductive method is not only time-consuming but also costly.
- (5) Again, the use of statistics in induction cannot prove a hypothesis.
- (6) Besides the statistical method, the other method used in induction is of controlled experimentation.

### **Conclusion**

In reality, both deduction and induction are related to each because of some facts. They are the two forms of logic that are complementary and co-relative and help establish the truth.

### **NATURE OF ECONOMIC GENERALISATIONS OR LAWS**

A generalization is the establishment of a general truth on the basis of particular experiences. Thus economic generalizations or laws are statements of general tendencies or uniformities in the relationships between two or more phenomena.

In this sense, economic laws are like scientific laws which trace out a causal relationship between two or more phenomena. As in natural sciences, a definite result is expected to follow from a particular cause in economics. The law of gravitation states that things coming from above must fall to the ground at a specific rate, other things being equal. Similarly in economic, the law of demand states that other things remaining the same, a fall in price leads to an extension in demand, and vice versa. Thus economic laws resembling scientific laws are positive, such as the law of diminishing returns which deals with inanimate nature. But mostly economic laws are behaviorist, such as the law of diminishing marginal utility, the law of demand, the law of equi-marginal utility, etc. which depend upon human behavior. Since the positive and behaviorist economic laws are like scientific laws, they are universally valid. Professor Robbins stated in this context that “Economic laws are on all fours with the propositions of all other sciences.”

But the behaviorist laws of economics are not as exact as the laws of natural science because they are based on human tendencies which are not uniform. This is because all men are not rational beings. Moreover, they have to act under the existing social and legal institutions of the society in which they live. As rightly pointed out by Professor Schumpeter:

“Economic laws are much less stable than are the ‘laws’ of any physical science... and they work out differently in different institutional conditions.”

Moreover, unlike the natural sciences, there is little scope of experimentation in economics because the economist has to deal with man who acts in accordance with his tastes, habits, idiosyncrasies, etc. The entire universe or that part of it in which he carries out his research is the economist’s laboratory.

Marshall, therefore compared the laws of economics with the laws of tides “rather than with simple and exact law of gravitation. For the actions of men are so various and uncertain that the best statement of tendencies, which we can make in a science of human conduct, must needs be inexact and faulty.”

Professor Seligman characterized economic laws as “essentially hypothetical.” Because they assume ‘other things being equal’ and draw conclusions from certain hypotheses. In this sense, all scientific laws are also hypothetical as they too assume the ceteris paribus clause (i.e. other things being equal). For instance, other things being equal, a combination of hydrogen and oxygen in the proportion of 2:1 will form water. If, however, this proportion is varied or/and the required temperature and pressure are not maintained, water will not be formed. Still there is difference in hypothetical element present in economic laws as against scientific laws.

But as compared with the laws of other social sciences the laws of economics are less hypothetical but more exact, precise and accurate. This is because economics possesses the measuring rod of money which is not available to other social science like ethics, sociology, etc. As pointed out by Marshall: “A law of social science... is a statement ... that a certain course of action may be expected under certain conditions from members of a social group.

There are certain generalizations in economics which may be stated as truism. They are true like axioms and do not have any empirical content, such as ‘saving is a function of income’, ‘human wants are numerous’, etc. Such statements make economic generalizations universally valid.

### **LAW OF DIMINISHING MARGINAL UTILITY**

One of the characteristics of human wants is its limited intensity. As we have more of anything in succession, our intensity for its subsequent units diminishes. This generalization of satiable wants is known as the law of diminishing marginal utility. Hermann Gossen was the first to formulate this law in 1854 though the name was given by Marshall, Jevons called it Gossen’s First Law.



Gossen stated it thus: “The magnitude of one and the same satisfaction, when we continue to enjoy it without interruption, continually decreases until satiation is reached.”

Taking the example of apples as shown in Table, when our hypothetical consumer takes the first apple he derives the maximum satisfaction in terms of 20 utils. As he continues to consume the second, third and the fourth units in succession, he derives less and less satisfaction 15, 10 and 5 utils respectively. With the consumption of the 5<sup>th</sup> apple he reaches the satiety point because the satisfaction derived from that unit is zero.

Diagrammatically, the curve BMU is the diminishing utility curve in the Figure. It shows that marginal utility diminishes as more and more units of the commodity (apple) are consumed, till the satiety point C is reached. Consumption of further units gives disutility as shown by the movement of the curve from point C towards MU.

### **ASSUMPTION**

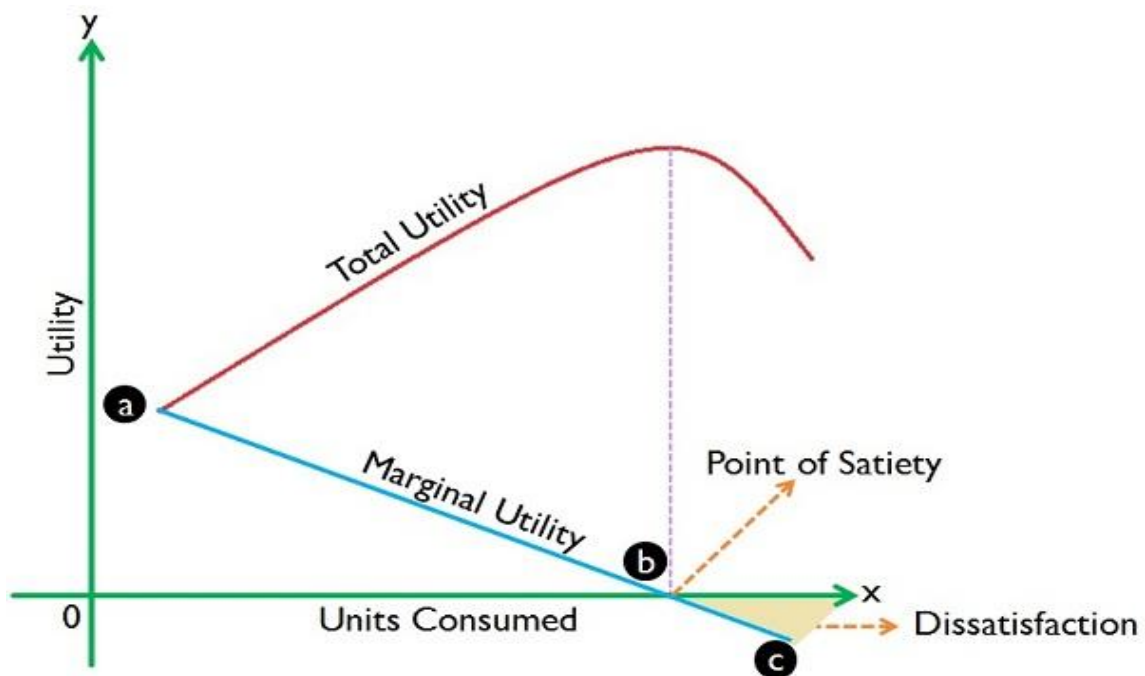
The entire Marshallian utility analysis comprising the law of Diminishing Marginal Utility, the Law of Maximum Satisfaction, the Concept of Consumer's Surplus and the Law of Demand is based on these assumptions. Before we deal with these notions, it is instructive to study the relation between total utility and marginal utility.

Every commodity possesses utility for the consumer. When the consumer buys apples he receives them in units, 1, 2, 3, 4, etc. 2 apples have more utility than 1, 3, more utility than 2, and more than 3. The units of apples which the consumer chooses are in a descending order of their utilities. In his estimation, the best out of the lot available to him and thus gives him the highest satisfaction, measures as 20 utils. The second apple will naturally be the second best with lesser amount of utility than the first and 15 utils. The third apple has 10 utils and the fourth 5 utils. Total utility connotes the sum total of utilities obtained by the consumer from different units of a commodity. In our illustration, the total utility of two apples is 35 (20+15) utils, of three apples 45 (20+15+10) utils, and of four apples 50 (20+15+10+5). Marginal utility is the addition made to total utility by having an additional unit of the commodity. The total utility of the two apples is 35 utils. When the consumer consumes the third apple, the total utility becomes 45 utils. Thus, marginal utility of the third apple is 10 utils (45-35). In other words, marginal utility of a commodity is the loss in utility of one unit less is consumed.

The relation between total and marginal utility is explained with the help of the below table.

Units of Apple	TU in Utils	MU in Utils
0	0	0
1	20	20
2	35	15
3	45	10
4	50	5
5	50	0
6	45	-5
7	35	-10

So long as total utility is increasing, marginal utility is decreasing up to the 4<sup>th</sup> unit. When total utility is maximum (at the fifth unit), marginal utility is zero. It is the point of satiety for the consumer. When total utility is decreasing, marginal utility is negative (the sixth and the seventh units). These units give disutility or dissatisfaction, so it is no use having them.



This relationship is shown in the Figure where BTU is the total utility curve and BMU is the marginal utility curve. So long as the BTU curve is rising, the BMU curve is falling.

When the former reaches the highest point Q, the latter touches the X-axis at C where utility is zero. When the BTU starts falling from Q to TU, the BMU becomes negative from C onwards.

### **Its Limitations**

This is a universal law and holds true in the case of physiological, social or artificial wants. It is another thing that in the case of certain commodities the limit of satiety is soon reached, while others take some time. But the law holds only under certain conditions:

- (a) There should be a single commodity with homogeneous units wanted by an individual consumer. All units of apple should be of the same weight and quality.
- (b) There should be no change in the taste, habit, custom, fashion and income of the consumer. A change in any of them will increase rather than diminish utility.
- (c) There should be continuity in the consumption of the commodity.
- (d) Units of the commodity should be of a suitable size.
- (e) Prices of the different units and of the substitutes of the commodity should remain the same.
- (f) The commodity should not be indivisible.
- (g) The consumer should be an economic man who acts rationally.
- (h) Goods should be of ordinary type. If they are commodities, like diamonds and jewels, or hobby goods like stamps, coins or paintings, the law does not apply.

Lastly, our intensity for money increases as we have more of it. No doubt the marginal utility of money does not become zero, but it definitely falls as a person acquires more and more money.

### **Importance of the law**

The Law of Diminishing Marginal Utility is the basic law of consumption.

The change in design, pattern and packing of commodities very often brought about by producers is in keeping with the law.

The law helps to explain the phenomenon in the value theory that the price of a commodity falls when its supply increases.

The principle of progression in taxation is also based on this law. As a person's income increases, the rate of tax rises because the marginal utility of money to him falls with the rise in his income.

Lastly, this law underlines the socialist plea for an equitable distribution of wealth. The marginal utility of money to the rich is low, it is therefore advisable that their surplus wealth

be acquires by the State and distributed to the poor who possess high marginal utility for money.

### Demand

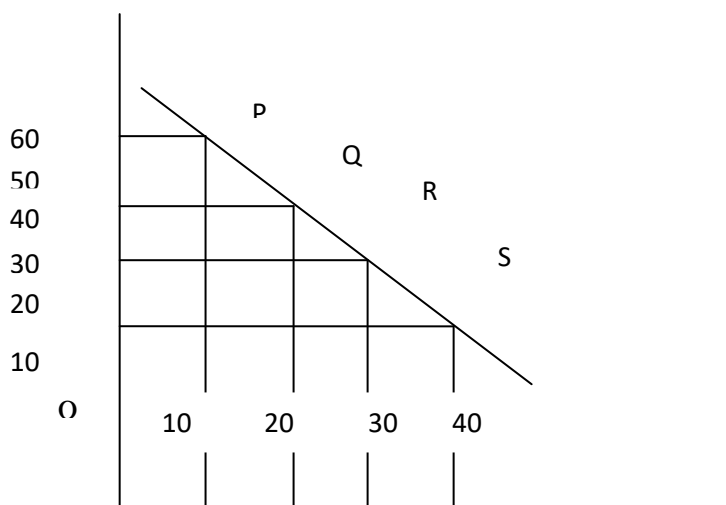
Marshall's theory of market demand. Demand is a function of price, income, price of related goods and tastes and is expressed as  $D=f(p, y, pr, t)$ . When income, price of related goods and tastes are given, the demand function is  $D=f(p)$ . It shows quantities if a commodity purchased at given price. Demand is also related to a period of time.

An individual consumer's demand refers to the quantities of a commodity demanded by him at various prices, other things remaining equal. An individual's demand for a commodity is shown on the demand schedule and on the demand curve. A demand schedule is a list of prices and quantities and its graphic representation is a demand curve.

TABLE  
DEMAND SCHEDULE

Price (in `)	Quantity (units)
0.60	10
0.50	20
0.40	30
0.30	40

The demand schedule reveals that when the price is 60 paise, quantity demanded is 10 units. If the price happens to be 50 paise, quantity demanded is 20 units, and so on.



In Figure D is the demand curve drawn on the basis of the above demand schedule. The dotted points P, Q, R, S, on the D curve, show the various price-quantity combinations. Marshall calls them “demand points”. The first combination is represented by the first dot and the remaining price-quantity combinations move to the right toward D. viewed in an unconventional manner any point on an individual demand curve may be thought of as the highest price at which a given quantity of the commodity will be bought by the consumer.

The individual demand curve focuses our attention on the effects of a fall (rise) in the price of one commodity on the consumer’s behavior. They are the substitution and income effects.

- (1) It results in a tendency for the consumer to buy more of the good since It has become cheaper and less of it when it becomes dearer. This is due to the substitution effect of the change in relative price.
- (2) A change in the price of the commodity affects the real income of the consumer. With a fall in the price of the commodity, the consumer’s real income increases and as a consequence of the income effect he buys more of the commodity. If the fall in price is moderate, the consumer spends very little on the commodity. Both the substitution and income effects are responsible for the negative slope of the demand curve.

### **LAW OF DEMAND**

This law expresses a relationship between the quantity demanded and its price. It may be defined in Marshall’s words as “the amount demanded increases with a fall in price, and diminishes with a rise in price.” Thus it expresses an inverse relation between price and demand. The law refers to the direction in which quantity demanded changes with a change in price. On the figure, it is represented by the slope of the demand curve which is normally negative throughout its length. The inverse price-demand relationship is based on other things remaining equal.

These assumptions are: (i) there is no change in the tastes and preferences of the consumer; (ii) the income of the consumer remains constant; (iii) there is no change in customs; (iv) the commodity to be used should not confer distinction on the consumer; (v) there should not be any substitutes of the commodity; (vi) there should not be any change in the prices of other products; (vii) there should not be any possibility of change in the price of the products being used; (viii) there should not be any change in the quality of the product, and (ix) the habits of the consumers should remain unchanged. Given these conditions, the law of demand operates. If there is change even in one of these conditions, it will stop operating.

## **Causes of Downward Sloping Demand Curve**

- (1) The law of demand is based on the Law of Diminishing Marginal Utility. According to this law, when a consumer buys more units of a commodity, the marginal utility of that commodity continues to decline. Therefore, the consumer will buy more units of that commodity only when its price falls. When less units are available, utility will be high and the consumer will be prepared to pay more for the commodity. This proves that the demand will be more at a lower price and it will be less at a higher price. That is why the demand curve is downward sloping.
- (2) Every commodity has certain consumers but when its price falls, new consumers start consuming it, as a result demand increases.
- (3) When the price of a commodity falls, the real income of the consumer increases because he has to spend less in order to buy the same quantity. On the contrary, with the rise in the price of the commodity, the real income of the consumer falls. This is called the income effect.
- (4) The other effect of change in the price of the commodity is the substitution effect. With the fall in the price of a commodity, the prices of its substitutes remaining the same, consumers will buy more of this commodity rather than the substitutes. As a result, its demand will increase. On the contrary, with the rise in the price of the commodity its demand will fall, given the price of the substitutes. For instance, with the fall in the price of tea, the price of coffee being unchanged, the demand for tea will rise, and contrariwise, with the increase in the price of tea, its demand will fall.
- (5) There are persons in different income groups in every society but the majority is in low income group. The downward sloping demand curve depends upon this group. Ordinary people buy more when price falls and less when price rises. The rich do not have any effect on the demand curve because they are capable of buying the same quantity even at a higher price.
- (6) There are different uses of certain commodities and services that are responsible for the negative slopes of the demand curve. With the increase in the price of such products, they will be used only for more important uses and their demand will fall. On the contrary, with the fall in price, they will be put to various uses and their demand will rise. For instance, with the increase in the electricity charges, power will be used primarily for domestic lighting, but if the charges are reduced, people will use power for cooking, fans, heaters, etc.

## **ELASTICITY OF DEMAND**

### **MEANING**

Demand is a function of price. When price changes demand changes. But it seldom happens that price changes lead to uniform changes in demand. Sometimes demand varies much and at other times little due even to the same change in price. There are certain goods like vegetable ghee, salt, etc., whose demand does not contract much with the rise in their prices. While there are goods like radios, cars, etc., whose demand contracts much with the rise in their prices. The law of demand does not solve this problem of the degree of change in demand to a change in price. The credit goes to Marshall who offered a solution by formulating the concept of price elasticity of demand in these words: "The elasticity of demand in a market is great or small according as the amount demanded increases much or little for a given fall in price, and diminishes much or little for a given rise in price."

Professor Lipsey: "Elasticity of demand may be defined as the ratio of the percentage change in demand to the percentage change in price." Mrs Robinson's definition is more clear: "The elasticity of demand at any price or at any output, is the proportional change of amount purchased in response to a small change in price, divided by the proportional change of price." Thus, price elasticity of demand is the ratio of percentage change in amount demanded to a percentage change in price. It may be written as

$$E_p = \frac{\% \text{ change in amount demanded}}{\% \text{ change in Price}} = \frac{\Delta q / q}{\Delta p / p}$$

(a) Price elasticity of demand may be unity, greater than unity, less than unity, zero or infinite. These five cases are explained with the aid of the following figures.

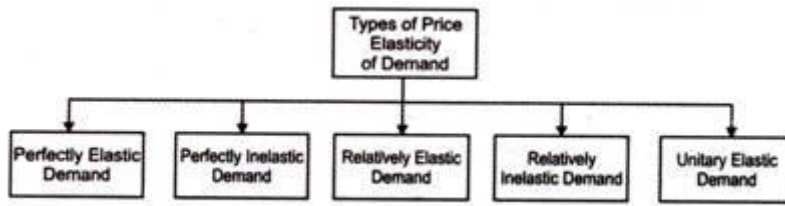
### **Types of Price Elasticity of Demand**

The extent of responsiveness of demand with change in the price is not always the same.

The demand for a product can be elastic or inelastic, depending on the rate of change in the demand with respect to change in price of a product.

Elastic demand is the one when the response of demand is greater with a small proportionate change in the price. On the other hand, inelastic demand is the one when there is relatively a less change in the demand with a greater change in the price.

**For better understanding the concepts of elastic and inelastic demand, the price elasticity of demand has been divided into five types, which are shown in Figure-1:**



**Figure-1: Different Types of Price Elasticity of Demand**

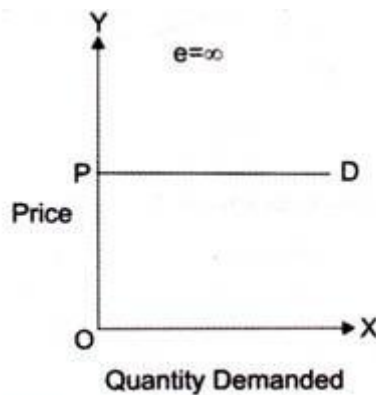
Let us discuss the different types of price elasticity of demand (as shown in Figure-1).

### 1. Perfectly Elastic Demand:

When a small change in price of a product causes a major change in its demand, it is said to be perfectly elastic demand. In perfectly elastic demand, a small rise in price results in fall in demand to zero, while a small fall in price causes increase in demand to infinity. In such a case, the demand is perfectly elastic or  $e_p = \infty$ .

The degree of elasticity of demand helps in defining the shape and slope of a demand curve. Therefore, the elasticity of demand can be determined by the slope of the demand curve. Flatter the slope of the demand curve, higher the elasticity of demand.

**In perfectly elastic demand, the demand curve is represented as a horizontal straight line, which is shown in Figure-2:**



**Figure-2: Perfectly Elastic Demand**

From Figure-2 it can be interpreted that at price  $OP$ , demand is infinite; however, a slight rise in price would result in fall in demand to zero. It can also be interpreted from Figure-2 that at price  $P$  consumers are ready to buy as much quantity of the product as they want. However, a small rise in price would resist consumers to buy the product.

Though, perfectly elastic demand is a theoretical concept and cannot be applied in the real situation. However, it can be applied in cases, such as perfectly competitive market and homogeneity products. In such cases, the demand for a product of an organization is assumed to be perfectly elastic.

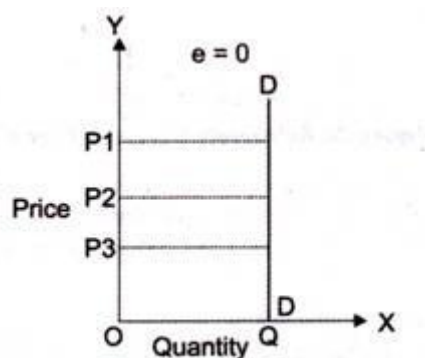


From an organization's point of view, in a perfectly elastic demand situation, the organization can sell as much as it wants as consumers are ready to purchase a large quantity of product. However, a slight increase in price would stop the demand.

## 2. Perfectly Inelastic Demand:

A perfectly inelastic demand is one when there is no change produced in the demand of a product with change in its price. The numerical value for perfectly inelastic demand is zero ( $e_p=0$ ).

**In case of perfectly inelastic demand, demand curve is represented as a straight vertical line, which is shown in Figure-3:**



**Figure-3: Perfectly Inelastic Demand**

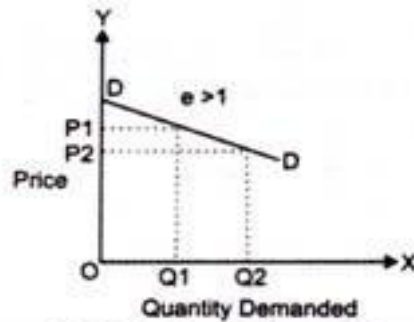
It can be interpreted from Figure-3 that the movement in price from OP1 to OP2 and OP2 to OP3 does not show any change in the demand of a product (OQ). The demand remains constant for any value of price. Perfectly inelastic demand is a theoretical concept and cannot be applied in a practical situation. However, in case of essential goods, such as salt, the demand does not change with change in price. Therefore, the demand for essential goods is perfectly inelastic.

## 3. Relatively Elastic Demand:

Relatively elastic demand refers to the demand when the proportionate change produced in demand is greater than the proportionate change in price of a product. The numerical value of relatively elastic demand ranges between one to infinity.

Mathematically, relatively elastic demand is known as more than unit elastic demand ( $e_p > 1$ ). For example, if the price of a product increases by 20% and the demand of the product decreases by 25%, then the demand would be relatively elastic.

**The demand curve of relatively elastic demand is gradually sloping, as shown in Figure-4:**



**Figure-4: Relatively Elastic Demand**

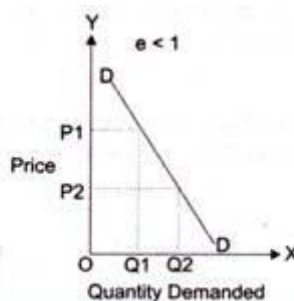
It can be interpreted from Figure-4 that the proportionate change in demand from OQ1 to OQ2 is relatively larger than the proportionate change in price from OP1 to OP2. Relatively elastic demand has a practical application as demand for many of products respond in the same manner with respect to change in their prices.

For example, the price of a particular brand of cold drink increases from Rs. 15 to Rs. 20. In such a case, consumers may switch to another brand of cold drink. However, some of the consumers still consume the same brand. Therefore, a small change in price produces a larger change in demand of the product.

#### **4. Relatively Inelastic Demand:**

Relatively inelastic demand is one when the percentage change produced in demand is less than the percentage change in the price of a product. For example, if the price of a product increases by 30% and the demand for the product decreases only by 10%, then the demand would be called relatively inelastic. The numerical value of relatively elastic demand ranges between zero to one ( $e_p < 1$ ). Marshall has termed relatively inelastic demand as elasticity being less than unity.

**The demand curve of relatively inelastic demand is rapidly sloping, as shown in Figure-5:**



**Figure-5: Relatively Inelastic Demand**

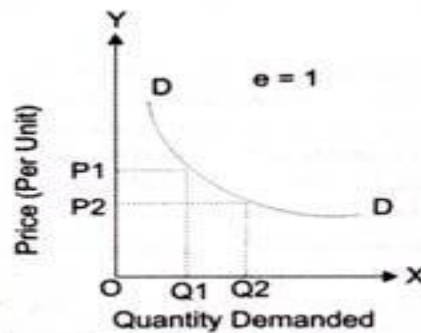
It can be interpreted from Figure-5 that the proportionate change in demand from OQ1 to OQ2 is relatively smaller than the proportionate change in price from OP1 to OP2. Relatively inelastic demand has a practical application as demand for many of products respond in the

same manner with respect to change in their prices. Let us understand the implication of relatively inelastic demand with the help of an example.

### 5. Unitary Elastic Demand:

When the proportionate change in demand produces the same change in the price of the product, the demand is referred as unitary elastic demand. The numerical value for unitary elastic demand is equal to one ( $e_p=1$ ).

**The demand curve for unitary elastic demand is represented as a rectangular hyperbola, as shown in Figure-6:**



**Figure-6: Unitary Elastic Demand**

From Figure-6, it can be interpreted that change in price  $OP_1$  to  $OP_2$  produces the same change in demand from  $OQ_1$  to  $OQ_2$ . Therefore, the demand is unitary elastic.

**The different types of price elasticity of demand are summarized in Table**

Table-4: Price Elasticity of Demand		
Numerical Value	Type of Price Elasticity	Description
$e_p = -\infty$	Perfectly elastic demand	There is a greater change in demand in response to percentage or smaller change in the price. For example, the demand for a product decreases or completely stops, with a little change in its price and vice versa.
$e_p = 0$	Perfectly inelastic demand	Consumers do not respond to the demand for a product with increase or decreases in its price. This implies that the demand remains the same with change in the price.
$e_p > 1$	Relatively elastic demand	The percentage change in the quantity demanded of a product is greater than percentage change in its price. In such a case, consumers generally switch to new brands when the price of a particular brand increases. However, some consumers are loyal to the same brand.
$e_p < 1$	Relatively inelastic demand	The change in the demand of a product is less than that of change in its price.
$e_p = -1$	Unitary elastic demand	The change in the demand and change in the price of a product is same.

## **CONSUMER'S SURPLUS**

### **INTRODUCTION**

The concept of consumer's surplus is based on the theory of demand. It was introduced by Marshall in the third edition of his Principle of Economics in 1895. Hicks and Allen rejected Marshall's utility theory of demand and, among others, the concept of consumer's surplus in the 1930's. In the forties of the present century, Hicks in a series of articles in the Review of Economic Studies tried to rehabilitate it with the aid of indifference curve technique. We study Marshall's notion and Hicks's reformulations.

### **STATEMENT OF THE CONCEPT**

The price which a consumer pays for a commodity is always less than what he is willing to pay for it, so that the satisfaction which he gets from its purchase is more than the price paid for it and thus he derives a surplus satisfaction which Marshall calls Consumer's Surplus. In the words of Marshall: "The excess of the price which he would be willing to pay rather than go without the thing, over that which he actually does pay, is the economic measure of this surplus satisfaction. It may be called 'consumer's surplus.'" Consumer's surplus according to Marshall, is a part of the benefit which a person derives from his environment or conjuncture.

To illustrate, let us suppose that a consumer is willing to buy 1 orange if its price were Rs 1, 2 orange if the price were 75 paise, 3 orange at 50 paise and 4 orange if it were 25 paise. Suppose the market price is 25 paise per orange. At this price the consumer will buy 4 orange and enjoy a surplus of Rs 1.50 (75+50+25).

Thus consumer's surplus can also be defined as the difference between what a consumer is willing to pay for a commodity and what he actually does pay for it.

Consumer's surplus is represented diagrammatically in Figure where DD1 is the demand curve for the commodity. If OP is the price, OQ units of the commodity are purchased and the price paid is  $OP \times OQ = \text{area OQRP}$ . But the total amount of money, he is prepared to pay for OQ units is OQRD. Therefore,  $CS = OQRD - OQRP = DR1P1$  and conversely a rise in price would diminish it.

### **PRODUCTION FUNCTION**

The production function is a purely technical relation which connects factor inputs and outputs. It describes the laws of proportion, is the transfer of factor inputs into products (outputs) at any particular time period.

## **INTRODUCTION**

In traditional production theory resources used for the production of a product are known as factors of production. Factors of production are now termed as inputs which may mean the use of the services of land, labour, capital and organization in the process of production. The term output refers to the commodity produced by the various inputs. Production theory concerns itself with the problems of combining various inputs, given the state of technology, in order to produce a stipulated output. The technology relationships between inputs and outputs are known as production functions. This chapter deals with production theory in the traditional manner while the modern approach in terms of the isoquant-isocost analysis is explained in the next chapter.

## **THE PRODUCTION FUNCTION**

The production function expresses a functional relationship between quantities of inputs and outputs. It shows how and to what extent output changes with variations in inputs during a specified period of time. Basically, the production function is a schedule of table showing the amount of output obtained from various combinations of inputs, it may be expressed in the form of an equation as  $P = f(A, B, C, D)$

Where O stands for the output of goods per unit of time and A, B, C, D are the various inputs of resources land, labour, capital and organization used in making the output.

The production function as determined by technical conditions of production is of two types: it may be rigid or flexible.

Even in the short run, it is possible to increase the quantities of one input while keeping the quantities of other inputs constant in order to have more output. This aspect of the production function is known as the law of variable proportions.

In the long run, it is possible for a firm to change all inputs up or down in accordance with its scale. This is known as returns to scale. The returns to scale are constant when output increases in the same proportion as the increase in the quantities of inputs. The returns to scale are increasing when the increase in output is more than proportional to the increase in inputs and they are decreasing if the increase in output is less than proportional to the increase in inputs.

## **THE LAW OF RETURNS TO SCALE**

The law of returns to scale describes the relationship between outputs and the scale of inputs in the long run when all the inputs are increased in the same proportion.

### **Assumptions**

This law assumes that

- (1) All factors (inputs) are variable but enterprise is fixed;
- (2) A worker works with given tools and implements;
- (3) Technological changes are absent;
- (4) There is perfect competition; and
- (5) The product is measured in quantities.

Given these assumptions, when all inputs are increased in unchanged proportions and the scale of production is expanded, the effect on output shows three stages. Firstly, returns to scale increase because the increase in total output is more than proportional to the increase in all inputs. Secondly, returns to scale become constant as the increase in total product is in exact proportion to the increase in inputs. Lastly, returns to scale diminish because the increase in output is less than proportionate to the increase in inputs. This principle of returns to scale is explained with the help of table.

This table reveals that in the beginning with the scale of production of (1 worker +2 acres of land), total output is 8. To increase output when the scale of production is doubled (2 workers + 4 acres of land), total returns are more than doubled. They become 17. Now of the scale is trebled (3 workers +6 acres of land), returns become more than three-fold, i.e. 27. It shows increasing returns to scale, if the scale of production is increased further, total returns will increase in such a way that the marginal returns become constant.

In the accompanying figure, RS is the returns to scale curve where from R to C returns are increasing, from C to D, they are constant and from D onwards they are diminishing.

#### (1) Increasing Returns to Scale.

Returns to scale increase because of the indivisibility of the factors of production. Indivisibility means that machines, management, labour, finance, etc., cannot be available in very small sizes. When a business unit expands the returns to scale increase because the indivisible factors are employed to their maximum capacity.

#### (2) Constant Returns to Scale.

But increasing returns to scale do not continue indefinitely. As the firm is enlarged further, internal and external economies are counter balanced by internal and external diseconomies. Returns increase in the same proportion so that there are constant returns to scale over a large range of output. Here the curve of returns to scale is horizontal (see CD in figure). It means that the increments of each input are constant at all levels of output.

#### (3) Diminishing Returns to Scale.

Constant returns to scale are only a passing phase, for ultimately returns to scale start diminishing. Indivisible factors may become inefficient and less productive. Business may

become unwieldy and produce problems of supervision and coordination. Large management creates difficulties of control and rigidities. To arise from higher factor prices or from diminishing productivities of the factors.

## **UNIT II**

### **ECONOMICS ORGANISATION**

#### **CAPITALISM**

##### **Definition**

Under capitalism, all farms, factories and other means of production are the property of private individuals and firms. They are free to use them with a view to make profit, or not to use them, if it so suits them. The desire for profit is the sole consideration with the property-owners in the use of their property. Besides free and unfettered use of their property, everybody is free to take up any line of production he likes and is free to enter into any contract with other fellow-citizens for his profit.

Although all modern States do impose certain restrictions on economic freedom in the interest of general welfare, yet even these restrictions leave much latitude to the propertied class to use their property in any manner they like, to start any business they think profitable to themselves, and to enter into contracts they think necessary in their own interest.

#### **FEATURES OF CAPITALISM**

1. **Right of Private Property.** The most important feature of capitalism is the existence of private property and the system of inheritance. Everybody has a right to acquire private property, to keep it, and, after his death, to pass it on to his heirs. The result of this system is that inequalities of wealth distribution are perpetuated. The rich people become richer and the poor become poorer.
2. **Freedom of Enterprise.** A very outstanding feature of the capitalistic order of the society is economic freedom. This freedom implies three things: (a) freedom of enterprise, (b) freedom of contract, and (c) freedom of use one's property.
3. **Freedom of Choice by the Consumers.** Another important feature of capitalism is that every consumer enjoys a freedom of choice of the commodities and services that he wishes to consume. He cannot be forced to consume any particular commodity or service nor can he be forced to give up the use of any commodity or service. Under capitalism the consumer is sovereign.
4. **Profit Motive.** Still another characteristic of capitalism is that the profit motive of individuals governs business enterprise. It is the profit motive which induces people to undertake any productive activity. To make profit is the primary motive of entrepreneurial activity and not love of society or social service. Those commodities



and services are produced under capitalism which are expected to yield maximum profit.

5. **Class-Conflict.** From this arises another feature of this economic order, viz., that there is class-conflict. The society has been divided into two classes, the “haves” and the “have-nots” which are constantly at war with each other.
6. **Un-co-ordinate Nature.** A very remarkable feature of this economic order is its uncoordinated nature. There is no conscious regulation or central direction of economic activity. Everything seems to go on automatically. Production is conducted as a result of the decisions of numerous isolated entrepreneurs. It is also at the same time influenced by the vast army of individual consumers who make their decisions without consulting one another.
7. **Entrepreneur’s Role.** A prominent feature of this economic order is the vital role which the entrepreneur plays under this system. The entire productive machinery of the country is under his direction. It is he who hires the other factors of production and undertakes to pay them. He is the sole agent of the community in the matter of production. It is difficult to see how the present system can work at all in the absence of the entrepreneur. Everything hinges on him.
8. **Control with Risks.** We also notice another feature of the present economic system, viz., the control of business goes with risk. This has been called the Golden Rule of Capitalism. He who risks his money must also control the business.
9. **Competition.** This is another characteristic of capitalism. The producers compete with one another to get the consumer’s choice or in selling the commodity as much as they can through advertisement. They may cut the price or improve the quality of the product or offer other concessions to the purchasers.
10. **Importance of Price System.** Capitalism is said to be governed by price. It is the price-mechanism which facilitates the functioning of capitalism. It is the price which equates the demand and supply of commodities and factors of production. For instance, if supply is short, price rises and demand is cut to the size of supply.
11. **Economic Inequalities.** A feature of capitalistic countries is the glaring inequalities of wealth and income. A few are very rich indulging in all sorts of conceivable luxuries, whereas the masses are not able to get even two square meals a day. What is more painful is that the gulf between the rich and poor is ever widening. The inequalities arise from unearned incomes which are due to uneven distribution of wealth. Larger wealth yields higher income.

## **MERITS OF CAPITALISM**

That capitalism has survived for centuries and is still going strong shows that the system must have certain inherent merits.

- (i) **Automatic Working.** One merit of capitalism is that it does not require any central directing authority for its functioning. It functions automatically through the price-mechanism if at any time, there is some disturbance in the economy, and it is rectified through price change.
- (ii) **Higher Efficiency and Incentive to Hard Work.** Another merit of capitalism is that under capitalism workers and entrepreneurs are encouraged to improve their efficiency and put in hard work.
- (iii) **Higher Rate of Capital Formation.** As we have already mentioned, people under capitalism have the right to hold property and pass it on in inheritance to their heirs and successors.
- (iv) **Economic Development and Prosperity.** The supporters of capitalism point to the rich variety and abundant supply of goods and services. The pure of profit compels the entrepreneurs to take risks, and to conquer new fields in production. Standard of living has raised all rounds, comforts of life have increased, and life has become richer and fuller. This is the service rendered by capitalism to society.
- (v) **Optimum Utilization of Resources.** The limited resources of the community are put to the most economical uses with as little waste as possible. There is keen competition among producers and entrepreneurs to produce and sell goods. Every producer and entrepreneur tries to use the productive resources at his disposal in the most economical manner in order to make maximum profit.
- (vi) **Just system.** The richest reward under capitalism goes to the ablest, the most daring as well as the most prudent entrepreneur.
- (vii) **Democratic.** The consumer's gives the system a democratic tinge. Nobody likes that his consumption should be dictated by some superior authority.
- (viii) **Encouragement to Enterprise and Risk-taking.** Another important merit of capitalism lies in this that it encourages the entrepreneurs to take risks and adopt bold policies, because in this way they can make higher profits. Higher the risk, greater is the profit. They also make innovations in order to cut their costs and maximum their profit.
- (ix) **Adaptability.** Finally, if the survival of the fittest is any criterion of the soundness of a system, capitalism is indeed sound and strong. So many crises have overtaken the system, but it somehow emerges, a bit crippled no doubt, but victorious. Its

adaptability to the changing economic conditions is indeed surprising. What greater proof do we need of its toughness and resiliency than the wonderful manner in which it has stood the strain of costly wars?

### **DEMERITS OF CAPITALISM**

1. **WASTEFUL Competition.** Competition, which is the cardinal feature of capitalist economy, is a sheer waste. Cut-throat competition does not confer any corresponding social benefit, though it may be advantageous to the firms concerned. There is no doubt that the efficiency of the capitalistic system depends on the existence of free competition and the mobility of the factors of production. But the existence of friction, legal, social and economic, hampers free competition with the result that the factors of production often lie idle.
2. **Human Welfare Ignored.** The supposed harmony between the interests of the consumers, i.e., the society, and those of the producers, does not actually exist. Lack of free competition, deliberate deceit practiced by unscrupulous producers and the ignorance and the impotence of the individual consumer turn the consumer-king into an abject slave, a victim of exploitation.
3. **Economic Instability and Unemployment.** The recurrence of the trade cycles, due to over-competition and over-saving resulting in over-production, must be considered one of the bitterest fruits of capitalism. Production is unplanned and is being augmented by ever increasing accumulation of capital, while the bulk of the consumers are being impoverished more and more.
4. **Property Rights Take Precedence Over Human Rights.** Capitalism lays undue emphasis on property rights as against human rights. Man, the first of God's creation, is treated like an ordinary chattel. Money, not man, rules the world and debases humanity.
5. **Class-Conflict.** Capitalism has sown the seeds of eternal social unrest by dividing the society into two hostile camps of capital and labour, the 'haves' and 'have-nots'. They look sullenly at each other, and are ever on the lookout for an opportunity to fight. This is due to the fact that their interests continually clash. The labour wants higher wages and short working hours which is against the interests of capitalists. Strikes and lock-outs are inevitable.
6. **Social Injustice and Economic Inequity.** The extreme inequality of wealth distribution, which is being accentuated as time goes on, is the most galling outcome of capitalism. On the one hand, there are a few rich people and, on the other, the vast masses fabulously steeped in abject poverty. The former are enjoying a luxurious life even without working,

whereas the latter cannot get two square meals a day even after putting in hard labour. They are clothed in rags and live in hovels and their children often die from lack of milk and medicine, whereas even the rich man's dogs are better fed. A system which results in such social injustice and economic inequalities deserves to be condemned.

7. **Misallocation of Resources.** Capitalism is also criticized on the ground of the misallocation of the productive resources of the country. Production under capitalism is not undertaken merely to satisfy the basic needs of the masses of people. The productive resources are utilized for the production of luxuries for the rich without producing sufficient quantity of goods for mass consumption. It is true that under capitalism production is carried on according to the wishes of the consumers. But since there are great inequalities in income and wealth, and demand depends on the purchasing power of the people, the rich people are able to exert greater pull in the product market.
8. **Emergence of Monopolies and Concentration of Economic Power.** It also happens under capitalism that perfect and free competition ceases to prevail and instead big combinations of powerful producers and monopolies emerge against whom it becomes difficult for an ordinary entrepreneur to compete. These big monopolies come to control the market on account of the huge resources that they command, and small producers are squeezed out. Thus, under capitalism free enterprise is merely nominal; it is not free enterprise for all.
9. **Malpractices.** In recent years, the image of capitalism has been tarnished by sharp practices indulged in by big industrialists and businessman. Such practices include payment of handsome salaries to influential directors, the large-scale evasion of fiscal laws, luxurious living at nation's cost and persistent generation of black money through clandestine deals and surreptitious transactions. The seamy side of capitalism has been thoroughly exposed by the scandals circulation about the big business personalities.

## **SOCIALISM**

### **DEFINITION**

Socialism, as an alternative to capitalism, has the widest appeal. A Swedish king once remarked to his minister, "If one is not a socialist up to the age of twenty-five, it shows that he has no heart; but if he continues to be a socialist after the age of 25, he has no head". Socialism seems to have caught the imagination of youth all the world over.

For a long time, the definition of socialism as given by the Webbs was accepted by a majority of the socialists, their definition runs thus: "A socialized industry is one in which the national instruments of production are owned by public authority or voluntary association and operated not with a view to profiting by scale to other people, but for the direct service of

those whom the authority or association represents”. This definition does not correspond to the present notion of socialism, because it does not imply any idea of planning.

The definition given by Dickenson seems to be better. According to him, socialism is an economic organization of society in which the material means of production are owned by the whole community and operated by organs representative of, and responsible to, the community according to a general plan, all members of the community being entitled to benefits from the results of such socialized planned production on the basis of equal rights.

According to another definition which brings out the implications of socialism more clearly, “Socialism refers to that movement which aims at vesting in society as a whole, rather than in individuals, ownership and management of all nature-made and man-made producers’ goods used in large-scale production to the end that an increased national income may be more equally distributed without materially destroying the individual’s economic motivation or his freedom of occupational and consumption choices.” In Morrison’s words, “the important essentials of socialism are that all the great industries and the land should be publicly or collectively owned, and that they should be conducted for the common good instead of private profit.

Socialism does not mean that all productive resources should be owned by the State; only the major instruments of production should be under the State control so that economy is run for social benefit rather than private profit. Socialism wants to change the old capitalistic structure of society and replace it by a new economic order based on equality and social justice. Instead of special prerogatives and vested interests, socialism lays emphasis on work and ability and equal opportunities for all regardless of caste, class and inherited privileges.

### **MARXIAN SOCIALISM**

Karl Marx, who wrote in 1867 his famous book *Das Kapital*, the Bible of socialism, is considered to be the father of scientific socialism. He tried to put the theory of socialism on a scientific basis. His theory led him to the conclusion that capitalism was doomed to decay.

Main Elements in Marxian Theory.

(1) Materialistic Conception of History. Karl Marx seeks to explain every event of history on economic ground. He gives an economic interpretation of history. All wars, riots and political movements have their origin in economic factors. There is an appropriate political organization, corresponding to every economic stage. A capitalist economy, for example, will evolve a system of government which perpetuates and supports property rights.

He goes on to explain how capitalism will generate conditions which will replace it by socialism. The capitalists will grow in wealth as time passes, but will become fewer and

fewer, the bigger whales swallowing the smaller ones. Monopolies will be created, production will expand necessitating scramble for markets abroad. This will lead to an imperialist war, and one war will be followed by another more terrible than the preceding one till capitalism perishes in the conflict, and the dictatorship of the proletariat is established.

(2) Labour Theory of Value. According to Karl Marx, value represents the human labour used in production. In other words, the value of a commodity depends on the labour used in the production of that commodity. It is equal to the socially necessary labour time. Marx defined value of a commodity “as the labour time required to produce an article under the normal conditions of production and with the average degree of skill and intensity prevalent at the time. Karl Marx has given the same definition of capital as Ricardo has defined it on the basis of past labour. According to him, a given quantity of skilled labour is equal to a bigger amount of ordinary labour. He said this deficiency is continuously being made good. Whatever may be the amount of skilled labour used in the production of a commodity but if it is equated to a commodity produced by ordinary labour, its price will represent only a given quantity of ordinary labour. According to Marx, the ratio of skilled labour and unskilled labour is fixed by convention. In his view, skilled labour is more valuable because, as compared with unskilled labour, it requires more time and labour.

(3) Theory of Surplus Value and Exploitation. Marx propounded his theory of surplus value on the basis of his theory of value. He said that in order to enable labour to carry on the work of production, he should have some instruments of production and other facilities but he lacks these facilities. Hence, he has to sell his labour to the capitalist. It is, however, not necessary for the capitalist to pay labour the full value of the product produced by him. Here Karl Marx supported his theory on the basis of a classical theory. This surplus is the creation of labour. It is created because labour is paid much less than is due to it. He characterizes the appropriation of the surplus value by the capitalist as robbery and exploitation. Karl Marx propounded his theory of exploitation on the basis of the theory of surplus value.

(4) Capitalist Development and its End. According to Karl Marx, the forces that operate in the capitalistic system lead to greater and greater exploitation of labour. The capitalist compete against one another to increase their profits. Karl Marx asserted that in the long run wages have a tendency to fall to the minimum subsistence level. In other words, according to Marx, excepting in the short run, wages do not exceed the subsistence level. But the reason put forward by Marx for the wage being equal to subsistence level are different from those given by Ricardo. According to Ricardo, wages keep to the

subsistence level owing to increase in population. But according to Marx, it is the excess of current supply of labour over demand that prevents the wages from rising above the subsistence level.

Since the supply of labour continues to be in excess of the demand for it, there is always in existence a large supply of labour which Marx calls the reserve army of labour. Hence, it is this large reserve army of labour which prevents wages from rising above the subsistence level.

There are three ways of increasing the rate of exploitation or the surplus value: (a) to increase the rate of exploitation by increasing the length of the working day. When the working hours are increased, total output increases, but wages being fixed, the rate of exploitation increased or the profits extracted by the capitalists increase, (b) surplus value or the rate of exploitation is increased by the more intensive use of labour. The working hours are not increased but the

Workers are made to produce more. But the surplus value cannot be substantially increased by these two methods; (c) according to Marx, there is a third and more important method of increasing surplus value, to increase the physical productivity of labour by technological progress. Technical progress implies improvements in techniques of production by which labour is able to produce more, working the same number of hours as before or working with the same intensity as before. The result is that the total output or labour increase. Since wages continue at the subsistence level, the margin between the subsistence output and the improved technique output widens. In this way, there is increase in surplus value or the rate of exploitation.

Surplus value is basic for profits and accumulation. The aim of the capitalist is to increase surplus value to the maximum. At first, when the supply of labour is large, wage rate remains constant at the subsistence level, but sooner or later, the demand for labour exceeds the available supply and wages rise, reducing thereby surplus value. With the loss of surplus value, there is a "crisis", as the capitalist has no incentive to invest. He also tries to create again a surplus of labour by using labour-saving machinery but this also is temporary solution as a too frequent resort to this device will lower the rate of profit and thereby reduce the capitalists' incentive to accumulate. Thus, capitalism is doomed to fail and give place to socialism. This is the picture which Marx himself gives of the end of capitalism.

### **GENERAL FEATURES OF SOCIALISM**

Although there is a great diversity of views among the socialists and there are as many types of socialism as there are socialists, yet it is possible to pick up a few general features of socialism.

(1) **Social Ownership of Means of Production.** The socialists believe in the abolition of private ownership in the instruments of production. Land, factories, railways, mines and every other means of production must be nationalized. Their ownership and control are to be vested in the State so that the State may provide work for everybody. Socialism of means of production is so important a characteristic feature of socialism that some writers define socialism as social ownership of the means of production. The means of production are the property of the State and not of private individuals. The profits of all enterprises go to the State exchequer to be utilized for the benefit of society rather than for the benefit of a few private individuals.

(2) **No Private Enterprise.** Generally, there is to be no private enterprise. Production is to be initiated and conducted by the State which will pay wages and other costs and keep profits to itself. Interest and rent as payments respectively to the capitalists and the landlords will disappear, for the State will be the capitalist, landlord and entrepreneur. However, in agriculture, as mentioned above, co-operatives may be permitted.

(3) **Economic Equality.** Living on unearned income is to be discouraged. Remuneration for work is to be according to the nature of work and is not to be equal. Earnings will vary according to ability. A limited operation of the law of demand and supply in this connection is envisaged.

(4) **Equality of Opportunity.** Although, as we have said above, socialism does not guarantee perfect equality of income. It aims at providing equality of opportunity. In fact, to provide equality of opportunity is a basic objective of socialism. Every individual, whether he belongs to a rich family or a poor family has an equal opportunity to rise in life under socialism.

(5) **Economic planning.** The State is in charge of both production and distribution. The allocation of the productive resources of the community will be determined according to the direction of a central authority. In fact, economic planning is an essential feature of socialism. Economic planning ensures speedy economic development. It ensures efficient and optimum allocation of resources. In the underdeveloped countries, where without raising the level of national income and wealth, socialism cannot be brought about, economic planning is absolutely essential for socialism, because without it the level of production cannot be raised.

(6) **Social Welfare and Social Security.** Another important feature of socialism is that it is social welfare consideration which guides productive activity in the economy rather than private profit. Under capitalism, only production of such commodities and services is undertaken which are expected to yield maximum profit.



(7) **Classical Society.** The socialists believe in a classless society where the distinction between the rich and the poor and the 'haves' and the 'have-nots' has completely disappeared. Thus, the caste system that prevails in India is repugnant to socialists. In a socialist State, every individual enjoys equality of opportunity regardless of caste, creed, family and religion. A socialist state is really a secular state.

### **CASE FOR SOCIALISM**

Socialists claim the following merits for their system:

1. **Social Justice.** The chief merit of socialism is that it assures of social justice. Under socialism, the inequalities of income are reduced to the minimum and the national income is more equitably and evenly distributed. The socialist principle provides for a fair share for all. No one is permitted to have unearned income. Exploitation of man by man is put an end to. Every individual is assured of equal opportunity to develop his latent faculties through proper education and training.
2. **Better Allocation of Resources.** Under socialism a central planning authority determines the allocation of resources among the various uses whose sole aim is to promote social welfare and social security. A planning authority is in a better position to assess the basic needs of the people and the intensity of their desires and to devote the resources to satisfy these desires and meet these needs in the best possible manner, it is wrong to say that socialism completely ignores consumers' preferences and demand for the various commodities and services.
3. **Rapid Economic Growth.** Another important benefit of a socialist State is that it promotes rapid economic growth. The task of promoting economic growth is not left in the hands of free private enterprise or market mechanism. The free private enterprise and the market forces cannot ensure rapid economic growth. A socialist State adopts economic planning as a means of promoting rapid economic growth. Economic planning makes it possible to use potential productive resources in the most effective and fruitful manner and in this way ensures rapid economic growth.
4. **Improving Productive Efficiency.** Another important merit of socialism is that under it national output can be significantly increased. This is due to the fact that under socialism, the production is undertaken to increase social welfare and not for the benefit of any particular individual. Under socialism, improved techniques of production and scientific research are made freely available to all organizations that may need them. Under socialism, production techniques are also improved because it avoids all wastes of competition.

5. **Social Security and Welfare.** Socialism provides social security for all citizens. The socialists believe that people should be given protection against uncertainties relation to income, work and living conditions and the burden of this provision should be borne by the entire society. That is why modern socialists include in their programme schemes of social insurance covering unemployment, accidents, sickness, old-age pensions, death grants, etc.
6. **Economic Stability.** There is another advantage of socialism, it ensures economic stability. Socialism eliminates trade cycles which cause a great hardship to the people. We do not come across depression, unemployment and idle productive capacity on socialist economic.

### **DEMERITS OF SOCIALISM**

1. **Bureaucracy and Red Tapism.** The most important set of arguments advances against socialism is one against the bureaucracy running of the economic machinery. Bureaucracy is considered to be inefficient in running a business. The civil servant does not feel the same keen self-interest as the employee of a private corporation, where his tenure is not so secure. The civil servant knows that he will get promotion by seniority; no amount of alertness or extra work is going to push him up in the graded list. There is routine and red-tape, a place safe for men of mediocre caliber and no room for extraordinary and dashing spirits.
2. (ii) **Not Successful in Business.** A government department cannot claim to score success in business, where quick decisions have to be taken and bold policies are called for. The government personnel are not such as can conquer new fields. The government can, and does, attract able men but conditions in government service are not congenial for the display of extraordinary ability. The reward is not considered worth the trouble.
3. (iii) **Insufficient Resources.** It is also urges that government cannot raise the huge amounts of capital which are necessary for the efficient running and expanding of all industries and trades.
4. (iv) **Misallocation of Resources.** Under socialism, there will be no automatic indicator for the most economical allocation of the resources of the community among different industries. A chronic mal-adjustment in demand and supply is feared.
5. (v) **Loss of Consumer's Sovereignty.** Under capitalism, the consumer enjoys sovereignty. Of course, this sovereignty is limited by his income, existence of monopoly, etc., yet the domain is wide enough for him to pick and choose. But, under socialism, he will lose this sovereignty altogether.

- (i) Loss of Economic Freedom. There will be loss of economic freedom under socialism. A serious charge against socialism is that, when freedom of enterprise disappears, even the free choice of occupation will go.
- 6. Lack of Incentives. It is also feared that incentive to hard work and stimulus to self-improvement will disappear altogether when personal gain or self-interest is eliminated. People will not give their best. Inventive ability, enterprising spirit and the go-ahead attitude will languish, and creative work will become impossible.
- 7. Concentration of Power in the State. The greatest danger of socialism is that too much power is concentrates in State. Under socialism, the State is not merely a political authority but it also exercises unlimited authority in the economic sphere.
- 8. Loss of personal Liberty. That under socialism there is no unemployment is conceded, but the critics retort by saying that there is also no unemployment in a jail.
- 9. Not Scientific. It may also be pointed out in the end that Marxian socialism is not so scientific after all.

## **MONOPOLISTIC COMPETITION**

### **MEANING**

Monopolistic competition refers to a market situation where there are many sellers of a differentiated product. “There is competition which is keen, though not perfect, between many firms making very similar, products.” No seller can have any perceptible influence on the price-output policies of the other seller nor can he be influenced much by their actions. Thus monopolistic competition refers to competition among a large number of sellers producing close but not perfect substitute products.

### **ITS FEATURES**

The following are the main features of monopolistic competition.

- (1) Large Number of Seller. In monopolistic competition the number of sellers is large. They are “many and small enough” but none controls a major portion of the total output.
- (2)Product Differentiation. One of the most important features of the monopolistic competition is product Differentiation. “A general class of product is differentiated if any significant basis exists for distinguishing the goods (or services) of one seller from those of another.” Product differentiation may be based on production and distribution techniques, trade marks, patent rights, etc. we discuss them below.
  - (i) By Changing the Quality of the Product. On the production side, it is the quality of the product which differentiates it from the others, such as the materials used, workmanship, durability, size, shape, design, color, fragrance, packing, etc. product differentiation

through quality changes is done for the purpose of adapting the product to the tastes and preferences of the consumers.

- (ii) By advertisement and Propaganda. On the distribution side, it is the sales promotion technique, the advertisement and propaganda about the product which differentiates it from the other product.
- (iii) By Patent Right and Trade Marks. There are also patent rights and trade marks which promote product differentiation. Copyrights also perform the same function.
- (4) Freedom of Entry and Exit of Firms. Another feature of monopolistic competition is the freedom of entry and exit of firms. The fact that firms are of small size and are capable of producing close substitutes make it possible for them to leave or enter the industry or group in the long-run.
- (5) Nature of Demand Curve. Under monopolistic competition no single firm controls more than a small portion of the total output of a product. No doubt there is an element of differentiation; nevertheless the products are close substitutes.

Therefore, the demand curve of a firm under monopolistic competition slopes downward to the right. It is highly elastic but not perfectly elastic within a relevant range of prices at which he can sell any amount.

We may conclude that under monopolistic competition the demand curve faced by the firm is highly elastic within its relevant range of prices. It means that it has some control over price due to product differentiation and there are price differentials between firms. Despite this, the slope of the demand curve is determined by the general level of the market price for the differentiated product. In so far as it exercises some control over price, it resembles monopoly and since its demand curve is affected by market conditions it resembles pure competition. Such a situation is, therefore, characterized as monopolistic competition.

## **THEORIES OF DISTRIBUTION**

The term 'distribution' in economics refers to personal distribution and functional distribution of income. Personal distribution relates to the forces governing the distribution of income and wealth among the various individuals of a country. Under personal distribution, we study the pattern of the distribution of national income and the shares received by the different classes. What is the share of the wage-earning class, of the retire class, and of the entrepreneurial class in the national income? Why is the share of the wage-earning classes in the national income lower than the other classes? Why is the wage of one person higher (or

lower) than the other? Why is the rent of one piece of land or house higher (or lower) than the other? These and other similar problems are studied under personal distribution of income.

In other words, under personal distribution of income we study the problem of inequality of income and wealth, its effects, and measures to remove or lessen inequalities. In the words of Jan Pen: "Personal distribution (or: the 'size distribution of income') relates to individual persons and their incomes. The way in which that income was acquired often remains in the background.

Functional distribution or 'factor share distribution' explain the share of total national income received by each factor of production. In other words, it relates to the distribution or rewards for the services of the factors of production. Rent, wages interest and profit are the rewards for the services of land, labour, capital and organization respectively.

### **THE RICARDIAN THEORY**

Ricardo's theory of distribution is based on his principle of differential rent as applied to the economic system as a whole. The underlying assumptions of the model are:

- (i) That the entire land is used in producing corn and the forces operating in agriculture serve to determine distribution in industry;
- (ii) That land is subject to the law of diminishing returns;
- (iv) That it is fixed in supply;
- (v) That the demand for corn is perfectly inelastic;
- (vi) That capital and labor are one variable input;
- (vii) That the state of technical knowledge is given, and there are no agricultural improvements;
- (viii) That all laborers are paid a subsistence wage;
- (ix) That the supply price of labour is constant and given;
- (x) That the demand for labour depends upon the accumulation of capital. This as well as the supply price of labour is independent of marginal productivity of labour.
- (xi) There is perfect competition.

Prof. Kaldor explain the Ricardian theory in terms of the "marginal principle"

And the "surplus principle." The "marginal principle" explains the share of rent in the national output and the "surplus principle" the division of the remaining share between wages and profits.

Given the total output of corn, the share of each factor can be determined. Rent per unit of labour is the difference between the average and the marginal product of labour. Or, total rent

is the difference between the average product and the marginal product of labour multiplied by the amount of labour-and-capital applied to land. Profit is the difference between the marginal product of labour and the wage rate. The wage rate is determined on the basis of the Wage Fund multiplied by the number of labourers employed at the subsistence level.

Thus out of the total corn produced and sold, rent is the first claim, and the residue (produce minus rent) is divided between wages and profits, interest being included in the latter. This is shown in Figure.

Where OY measures quantities of corn and OX, the amount of labour and-capital employed in agriculture. The curve AP represents the average product of labour and MP the marginal product of labour. With OM amount of (capital and labour) OQRM total corn is produced. When OM labour is employed its average product is RM the marginal product is TM. Rent per unit of labour being the difference between AP and MP is RT (=RM-TM). Total rent is shown by the rectangle PQRT, i.e. RT\*PT, rent per unit multiplied by the number of labourers employed (OM=PT). Thus out of the total output of corn OQRM, PQRT goes to the landlord as rent. The remaining output OPTM will be divided between labour and capital.

The share of labour, according to Ricardo, is determined by the subsistence wage. In the figures, OW is the subsistence wage per labour who needs a minimum of OW amount of corn for his subsistence. WL is the supply curve of labour which is infinitely elastic at OW subsistence wage rate. Thus OWLM is the share of labour in total output. The remaining output  $aaaawptl$  is profits. Profits equal the total product (OQRM) minus rent (PQRT) minus the wage bill (OWLM). Algebraically,  $WPTL=OQRM-(PQRT+OWLM)$ .

If the share of labour OWLM increases, it will be at the expense of the rate of profit which will start falling. When wages rise, profits necessarily fall. This may happen when protection is granted to agriculture, or taxes are levied and raised on manufacturing industry. OWLM also increased in the case of technical progress. Technical progress tends to shift the MP and AP curves upwards to the right. As a result, the rate of profit and wage rate rise. The latter induces increase in population and the demand for corn which in turn raises the price of corn. To meet the increased demand for corn, more labour is employed but at higher wages. The only adequate and permanent cause for the rise in wages, according to Ricardo, "is the increasing difficulty of providing food and necessaries for the increasing number of men." This results in the rise of labour costs, fall in the MP and AP of labour and the operation of the Law of Diminishing Returns. These factors tend to raise the price of corn further which in turn raises rents. In between the increase in rents and wages, the profits continue to be squeezed till they disappear. This is explained in Figure. 29.1 when the amount of labour

increases from OM to ON and the total output is OABN. Out of this, OWSN is the total wage bill and WABS is the rent. There are no profits at all.

### **It's Criticism**

*Firstly*, the Ricardian theory is not free from criticism; the Ricardian theory of distribution is the three-factor theory which determines the shares of three fairly distinct classes, the labourers, landlords and the capitalists.

*Secondly*, it is assumed that land is available for the production of only one commodity, corn. This is however a primitive nation.

*Third*, the assumption that capital and labour are fixed coefficients is untenable.

*Fourth*, one of the serious defects of Ricardo's theory of distribution is that it does not treat interest as a separate reward. Interest is supposed to be included in profits.

*Fifth*, the Ricardian theory is primarily based on the law of diminishing returns. Rapid increase of farm produce in the advanced nations has proved that Ricardo under-estimated the potentialities of technological progress in counteracting diminishing returns to land.

Sixth, the Ricardian view that the wage rate does not increase with the rise in population has been disproved.

### **Conclusion**

Despite these weaknesses, Ricardo's interest lay, according to Prof. Kaldor, not only in the problem of distributive shares, but in the belief that the theory of distribution held the key to an understanding of the working of the economic system, that is, of the forces governing the rate of progress, the effects of protection, the ultimate incidence of taxation, etc.

### **RENT**

#### **MEANING**

In popular language, the word rent is used to denote payments for the use of land, a house or a shop. It also denotes the hiring charges for a taxi, or a machine. It is in fact contract rent of gross rent, and include (a) interest for the capital invested in making improvements; (b) its depreciation and maintenance charges; (c) wages of management; (d) some profits as the reward for risk taking involved in hiring, leasing and investing; and economic rent which is a surplus arrived at by deducting items. Thus in economics rent is a surplus, 'the income derived from the ownership of land and other free gifts of nature, Marshall called it. It is surplus above cost of production; rent as an economic surplus, as used by modern economists means the earning of a factor of production in excess of the minimum amount necessary to keep it in its present use. It is not a differential surplus, the difference between the superior and the inferior grades of lands as Ricardo meant by rent.

## **WAGES**

### **MEANING**

Wages are a payment for the service of labour, whether mental or physical. Though in ordinary language an office executive a minister or a teacher is said to receive a salary; a lawyer or a doctor a fee; and a skilled or unskilled worker a wage, yet in economics no such distinctions are made for different services and all of them are said to receive a wage. In other words, wages include fees, commissions and salaries. It is another thing that some may be receiving more in the form of real wages and less in terms of money wages and vice versa.

Wages may be paid weekly, fortnightly, or monthly and partly at the end of the year in the form of a bonus. These are time-wages. But the bonus may be a task wage if a work is finished within a specified period or before that. Wages are also paid in accordance with the amount of work done; say in a shoe factory of a tailoring department as per one pair or pants manufactured. If the rate per pair of shoes or for pants is Rs 5, a worker will be paid according to the number of pairs or pants manufactured. These will be piece wages. Sometimes, time wages are supplemented by piece wages. Sometimes wages are regulated by the state in the interest of the low paid workers in certain or all industries that is a minimum wage which ensures a minimum standard of living.

### **The Neo-Classical Approach**

**Marginal Productivity Theory.** The 'marginalists' believe that the share of wages on national income has always been constant, because labour like any other factor receives wages equal to its marginal productivity. "Thus if the total supply of all factors is being taken as given, independently of price, and all are assumed to be of limited substitutes to one another, the share-out of the whole produce can be regarded as being determined by the marginal rates of substitution between them." This can be illustrated in terms of the adjoining Figure 34.7 where the quantity of labour is measured on X-axis, the quantities of all other factors being assumed as fixed. MP is the marginal amount of labour is employed; TM is its demand price per unit. OPTM is thus the share of labour in the total output OQRM. The rectangle PQRT is sufficient to remunerate the remaining factors on the basis of their marginal productivities.

This 'marginalist' approach is also known as the elasticity of substitution theory. If we take two factors labour (L) and capital (C), and the ratio of their marginal physical productivities is  $r$ , then the elasticity of substitution between the two is "the proportionate change in the ratio of the amounts of the factors divided by the proportionate change in the ratio of their



marginal physical productivities.” Thus it is only when the elasticity of substitution of labour for capital is unity that there is constancy of relative share of wages in the total output.

This analysis assumes a perfectly competitive factor market where factor utilization is constant, constant returns to scale with neutral technical progress. This implies a linear and homogeneous production function of the Cobb-Douglas form:

Where  $P$  is national output income),  $L$  is labour,  $C$  is capital, and  $k$  and  $a$  are positive constants,  $a$  being less than 1.

Professor Douglas himself was the first to test this function in the case of manufacturing industry in the United States. He came to the conclusion that the elasticity of output in relation to labour was constant and equal to  $\frac{3}{4}$ . Thus the elasticity of labour productivity was 4. It implies that one per cent increase in the amount of labour would increase the total output by  $\frac{3}{4}$  and the marginal productivity of labour would fall by  $\frac{1}{4}$  of one per cent. Thus the production function becomes where the share of labour is  $\frac{3}{4}$  and of capital  $\frac{1}{4}$ . The total output adds up to  $1(=\frac{3}{4}+\frac{1}{4})$  showing a constant share of labour in national income.

**Criticism.** The marginal productivity explanation of the constancy of the share of labour in national income is based on certain unrealistic assumptions which make it unacceptable to present-day economists.

First, the assumption that the production function is linear and homogeneous is unwarranted because it implies constant technology. A change in output is generally associated with some change in the technique of production.

Second, the theory is based on the unrealistic assumption of perfect competition.

Third, according to Professor Kaldor, the inadequacy of unit-elasticity of substitution becomes evident as soon as it is realized that the marginal rate of substitution between labour and capital can only be determined when the rate of wages and the rate of profit are already known.

Fourth, Professor Douglas’ analysis does not assign any reason for the constancy of the exponent  $a$  in the production function.

## **INTEREST**

### **MEANING**

In common parlance interest is payment made by a borrower to the lender for the money borrowed and is expressed as a rate per cent per year. In economics, interest has been defined in a variety of ways. Commonly, interest is regarded as the payment for the use or service of capital. If retained by the owner, it can be used by him for further production and the additional product he gets through the employment of his capital includes interest.

In Mill's words: "Interest is the remuneration for mere abstinence." According to the classical economists, it is only by postponing consumption that capital can be created.

Keynes regarded interest as a purely monetary phenomenon, payment for the use of money. It is the reward for parting with the liquidity of money. In Keynes words, "The possession of actual money lulls our disquietude; and the premium which we require to make us part with money is the measure of the degree of our disquietude." Interest is thus a premium which is offered to wealth holders to induce them to part with their cash.

In other words, interest is simultaneously the reward for the pure yield of capital, of saving, for the foregoing of liquidity and the supply of money.

## **PROFITS**

### **MEANING**

In ordinary parlance, profit is the surplus of income over expenses of production according to a businessman. It is the amount left with him after he has made payments for all factor services used by him in the process of production. But he may not have been careful in calculating all such expenses of production in the economic sense. Therefore, economists regard businessman's profit as gross profit as distinct from pure or net profit because it includes the following constituents.

- (1) Rent on Land. The businessman may have used his own land for erecting the factory so that he may be saved of the botheration of paying rent to some other landlord. This rent is included in his profit. This is implicit or imputed rent which is not a part of his profit.
- (2) Interest on Capital. Similarly, he may have used his own capital in his business in order to avoid the inconvenience of borrowing from some other person. The implicit interest is again included in his gross profit.
- (3) Wages of Management. The businessman may have been busy in organizing, coordinating and managing the entire business himself. But he may have been contented with income received after meeting all expenses of production. If he had not performed the work of management himself he would have employed a manager to whom he would have paid wages.
- (4) Depreciation Changes. During the process of production machinery and plants depreciate and become obsolete. Expenses incurred on their repairs and replacements are a part of the cost of production. Hence they should be excluded from gross profit for the purpose of calculating net profit.

- (5) Insurance Charges. Every firm gets itself insured against fire, accidents and losses of other kinds for which it pays large premiums annually to insurance companies.
- (6) Net profit. Net, true, economic or pure profit is the residue left to the entrepreneur after deducting all the items enumerated above from gross profit. Net profit, however, includes the following elements within it.
- (ii) Reward for Uncertainty Bearing. Pure profit which an entrepreneur receives is the reward of bearing uninsurable risks and uncertainties.
  - (iii) Reward for Coordination. The present system of production is one of coordinating the right quantity of factors in right proportions.
  - (iv) Rent of Ability. Net profit accruing to the businessman also includes the rent of his ability.
  - (v) Reward of Innovation. An entrepreneur who innovates by bringing out a new product or technique of production earns higher profit than others.
  - (vi) Monopoly Gains. The modern market system is characterized by the existence of imperfect markets.
  - (vii) Windfalls. Pure profit earned by an entrepreneur may also include fortuitous or chance gain.

We may conclude that an economist's profit is quite distinct from a businessman's profit.

## UNIT III

### MONEY AND BANKING

#### EVOLUTION AND KINDS OF MONEY

The word “money” is derived from the latin word “moneta” which was the surname of the Roman Goddess of Juno in whose temple at Rome, money was coined. The origin of money is lost in antiquity. Even the primitive man had some sort of money. The type of money in every age depended on the nature of its livelihood. In a hunting society, the skins of wild animals were used as money. The pastoral society used livestock, whereas the agricultural society used grains and foodstuffs as money. The Greeks used coins money.

#### Stages in the Evolution of Money

The evolution of money has passed through the following five stages depending upon the progress human civilization at different times and place.

##### 1. **Commodity Money**

Various types of commodities have been used as money from the beginning of human civilization. Stones, spears, bows and arrows, and axe’s were used as money in the hunting society.

##### 2. **Metallic Money**

With the spread of civilization and trade relation by land and sea, metallic money took the place of commodity money. Many nation started using silver, gold, copper, tin, etc. as money.

##### 3. **Paper Money**

The development of paper money started with goldsmiths who kept strong safes to store their gold. As goldsmith was thought to be honest merchants, people started keeping their gold with them for safe custody. In return, the goldsmith gave the depositors a receipt promising to return the gold on demand. These receipts of the goldsmith were given to the sellers of commodities by the buyers. Thus the receipts of the goldsmiths were a substitute for money. Such paper money was backed by gold and was convertible on demand in to gold. This ultimately led to the development of bank notes.

##### 4. **Credit Money**

Another stage in the evolution of money in the modern world is the use of the cheque as money. The cheque is like a bank note in that it performs the same function. It is a means of transferring money or obligation from one person to another. But a cheque is different

from a bank note. A cheque is made for a specific sum, and it expires with a single transaction. But a cheque is not money. It is simply a written order to transfer money. However, large transactions are made through cheques these days and bank notes are used only for small transactions.

## **5. Near Money.**

The final stage in evolution of money has been the use of bills of exchange, treasury bills, bonds, debentures, savings certificates, etc. They are known as “near money”. They are close substitutes for money and are liquid assets. Thus in the final stage of its evolution money has become intangible. Its ownership is now transferable simply by book entry.

## **Function of Money**

Money performs a number of primary, secondary, contingent and other functions which not only remove the difficulties of barter but also oils the wheels of trade and industry in the present day world. We discuss these functions one by one.

### **1. Primary Functions**

The two primary functions of money are to act as a medium of exchange and as a unit of value.

#### *(i) Money as a Medium of exchange.*

This is the primary function of money because it is out of this function that its other functions developed. By serving as a medium of exchange, money removes the need for double coincidence of wants and the inconveniences and difficulties associated with barter. The introduction of money as a medium of exchange decomposes the single transaction of barter into separate transactions of sale and purchase, thereby eliminating the double coincidence of wants. This function of money also separates the transaction in time and place because the sellers and buyers of a commodity are not required to perform the transactions at the same time and place. This is because the seller of a commodity buys some money and money in turn, buys the commodity over time and place.

#### *(ii) Money as Unit of Value.*

The second primary function of money is to act as a unit of value. Under barter one would have to resort to some standard of measurement, such as a length of string or a piece of wood. Since one would have to use a standard to measure the length and height of any object, it is only sensible that one particular standard should be accepted as the standard. Money is the standard for measuring value just as the yard or metre is the standard for measuring length. The monetary unit measures and expresses the values of all goods and services. In fact, the monetary unit expresses the value of each good or

services in terms of price. Money is the common denomination which determines the rate of exchange between goods and services which are priced in terms of the monetary unit. There can be no pricing process without a measure of value.

## 2. Secondary Function

Money performs three secondary functions: (i) as a standard of deferred payments, (ii) as a store of value, and (iii) as a transfer of value. They are discussed below:

- (i) *Money as a Standard of Deferred payments.* The third function of money is that it acts as a standard of deferred or postponed payments. All debts are taken in money. It was easy under barter to take loans in goats or grains but difficult to make repayments in such perishable articles in the future. Money has simplified both the taking and repayment of loans because the unit of account is durable. Money links the present values with those of the future. It simplifies credit transaction. It makes possible contract

## Credit creation by commercial banks

### 1. Do banks create credit?

The creation of credit or deposits is one of the most important function of commercial banks. Like other corporation, banks aim at earning profits. For this purpose, they accept cash in demand deposits and advance loans on credit to customers. When a bank advances a loan, it does not pay the amount in cash. But it opens a current account in his name and allows him to withdraw the required sum by cheques. In this way, the bank creates credit or deposits.

Demand deposits arise in two ways: one, when customers deposit currency with commercial banks, and two, when banks advance loans, discount bills, provide overdraft facilities, and make investments through bonds and securities. The first type of demand deposits are called “primary deposits”. Banks play a passive role in opening them. The second type of demand deposits are called “derivate deposits”. Banks actively create such deposits.

Do banks really create credit or deposits?

There have been two views on this subject: one held by certain economists like Hartley withers, and the other held by practical like walter leaf.

### 1. Meaning and Types of Monetary Standard

Monetary standard refers to the overall set of laws and practices which control the quality and quantity of money in a country. It is, in fact, the standard money of the country which determines and regulates the exchange value of goods and services. Thus the monetary

standard of a nation is its standard monetary unit. A monetary standard aims at maintaining stability in the internal as well as external value of the currency.

There have been different types of monetary standards in the evolution of money. But only two types of monetary standards in the recent past. They are metallic or commodity standard and paper or fiat standard. The metallic standard refers to a monetary system in which the value of the monetary unit is expressed in terms of a fixed quantity of some metal. If the monetary system is related to only one metal, it is known as monometallism. Monometallism may refer to the gold standard, if the metal is gold, and to silver standard, if the metal is silver. If the monetary unit is made of two metals, the monetary standard is called bimetallism. In the paper standard, paper notes circulate as legal tender money. They may be convertible into the metal, gold or silver, of a fixed weight, or inconvertible.

### **Quantity theory of Money**

The quantity theory of money states that the quantity of money is the main determinant of the price level or the value of money. Any change in the quantity of money produces an exactly proportionate change in the price level.

In the words of Irving Fisher, “Other things remaining unchanged, as the quantity of money in circulation increases, the price level also increases in direct proportion and the value of money decreases and vice versa.” If the quantity of money is doubled, the price level will also double and the value of money will be one half. On the other hand, if the quantity of money is reduced by one half, the price level will also be reduced by one half and the value of money will be twice.

Fisher has explained his theory in terms of his equation of exchange:

$$PT = MV + M'V'$$

Where P = price level, or 1 IP = the value of money;

M = the total quantity of legal tender money;

V = the velocity of circulation of M;

M' – the total quantity of credit money;

V' = the velocity of circulation of M;

T = the total amount of goods and services exchanged for money or transactions performed by money.

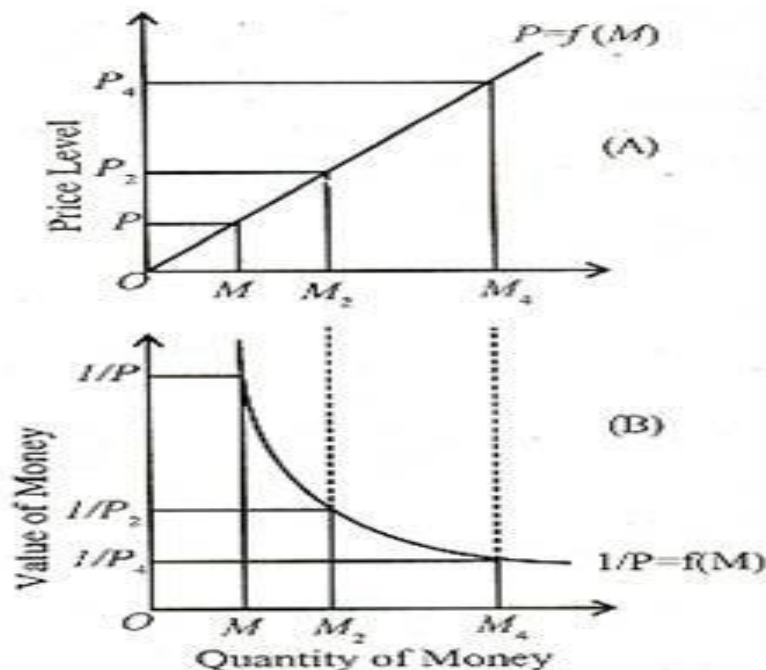
This equation equates the demand for money (PT) to supply of money (MV=M'V). The total volume of transactions multiplied by the price level (PT) represents the demand for money.

According to Fisher,  $PT$  is  $SPQ$ . In other words, price level ( $P$ ) multiplied by quantity bought ( $Q$ ) by the community ( $S$ ) gives the total demand for money. This equals the total supply of money in the community consisting of the quantity of actual money  $M$  and its velocity of circulation  $V$  plus the total quantity of credit money  $M'$  and its velocity of circulation  $V'$ . Thus the total value of purchases ( $PT$ ) in a year is measured by  $MV+M'V'$ . Thus the equation of exchange is  $PT=MV+M'V'$ . In order to find out the effect of the quantity of money on the price level or the value of money, we write the equation as

$$P = MV + M'V'$$

Fisher points out the price level ( $P$ ) ( $M+M'$ ) provided the volume of tra remain unchanged. The truth of this proposition is evident from the fact that if  $M$  and  $M'$  are doubled, while  $V$ ,  $V'$  and  $T$  remain constant,  $P$  is also doubled, but the value of money ( $1/P$ ) is reduced to half.

Fisher's quantity theory of money is explained with the help of Figure (A) and (B). Panel A of the figure shows the effect of changes in the quantity of money on the price level. To begin with, when the quantity of money is  $M$ , the price level is  $P$ .



When the quantity of money is doubled to  $M_2$ , the price level is also doubled to  $P_2$ . Further, when the quantity of money is increased four-fold to  $M_4$ , the price level also increases by four times to  $P_4$ . This relationship is expressed by the curve  $P = f(M)$  from the origin at  $45^\circ$ .

In panel B of the figure, the inverse relation between the quantity of money and the value of money is depicted where the value of money is taken on the vertical axis. When the quantity of money is  $M_1$  the value of money is  $HP$ . But with the doubling of the quantity of money to



$M_2$ , the value of money becomes one-half of what it was before,  $1/P_2$ . And with the quantity of money increasing by four-fold to  $M_4$ , the value of money is reduced by  $1/P_4$ . This inverse relationship between the quantity of money and the value of money is shown by downward sloping curve  $1/P = f(M)$ .

### **Assumptions of the Theory:**

Fisher's theory is based on the following assumptions:

1. P is passive factor in the equation of exchange which is affected by the other factors.
2. The proportion of  $M'$  to  $M$  remains constant.
3.  $V$  and  $V'$  are assumed to be constant and are independent of changes in  $M$  and  $M'$ .
4.  $T$  also remains constant and is independent of other factors such as  $M$ ,  $M'$ ,  $V$  and  $V'$ .
5. It is assumed that the demand for money is proportional to the value of transactions.
6. The supply of money is assumed as an exogenously determined constant.
7. The theory is applicable in the long run.
8. It is based on the assumption of the existence of full employment in the economy.

### **Criticisms of the Theory:**

The Fisher quantity theory has been subjected to severe criticisms by economists.

#### **1. Truism:**

According to Keynes, "The quantity theory of money is a truism." Fisher's equation of exchange is a simple truism because it states that the total quantity of money ( $MV + M'V'$ ) paid for goods and services must equal their value ( $PT$ ). But it cannot be accepted today that a certain percentage change in the quantity of money leads to the same percentage change in the price level.

#### **2. Other things not equal:**

The direct and proportionate relation between quantity of money and price level in Fisher's equation is based on the assumption that "other things remain unchanged". But in real life,  $V$ ,  $V'$  and  $T$  are not constant. Moreover, they are not independent of  $M$ ,  $M'$  and  $P$ . Rather, all elements in Fisher's equation are interrelated and interdependent. For instance, a change in  $M$  may cause a change in  $V$ .

Consequently, the price level may change more in proportion to a change in the quantity of money. Similarly, a change in  $P$  may cause a change in  $M$ . Rise in the price level may necessitate the issue of more money. Moreover, the volume of transactions  $T$  is also affected by changes in  $P$ . When prices rise or fall, the volume of business transactions also rises or falls. Further, the assumptions that the proportion  $M'$  to  $M$  is constant, has not been borne out

by facts. Not only this,  $M$  and  $M'$  are not independent of  $T$ . An increase in the volume of business transactions requires an increase in the supply of money ( $M$  and  $M'$ ).

### **3. Constants Relate to Different Time:**

Prof. Halm criticises Fisher for multiplying  $M$  and  $V$  because  $M$  relates to a point of time and  $V$  to a period of time. The former is a static concept and the latter a dynamic. It is therefore, technically inconsistent to multiply two non-comparable factors.

### **4. Fails to Measure Value of Money:**

Fisher's equation does not measure the purchasing power of money but only cash transactions, that is, the volume of business transactions of all kinds or what Fisher calls the volume of trade in the community during a year. But the purchasing power of money (or value of money) relates to transactions for the purchase of goods and services for consumption. Thus the quantity theory fails to measure the value of money.

### **5. Weak Theory:**

According to Crowther, the quantity theory is weak in many respects. First, it cannot explain 'why' there are fluctuations in the price level in the short run. Second, it gives undue importance to the price level as if changes in prices were the most critical and important phenomenon of the economic system. Third, it places a misleading emphasis on the quantity of money as the principal cause of changes in the price level during the trade cycle.

Prices may not rise despite increase in the quantity of money during depression; and they may not decline with reduction in the quantity of money during boom. Further, low prices during depression are not caused by shortage of quantity of money, and high prices during prosperity are not caused by abundance of quantity of money. Thus, "the quantity theory is at best an imperfect guide to the causes of the trade cycle in the short period" according to Crowther.

### **6. Neglects Interest Rate:**

One of the main weaknesses of Fisher's quantity theory of money is that it neglects the role of the rate of interest as one of the causative factors between money and prices. Fisher's equation of exchange is related to an equilibrium situation in which rate of interest is independent of the quantity of money.

### **7. Unrealistic Assumptions:**

Keynes in his General Theory severely criticised the Fisherian quantity theory of money for its unrealistic assumptions. First, the quantity theory of money for its unrealistic assumptions. First, the quantity theory of money is unrealistic because it analyses the relation between  $M$  and  $P$  in the long run. Thus it neglects the short run factors which influence this relationship.

Second, Fisher's equation holds good under the assumption of full employment. But Keynes regards full employment as a special situation. The general situation is one of the under-employment equilibrium. Third, Keynes does not believe that the relationship between the quantity of money and the price level is direct and proportional.

Rather, it is an indirect one via the rate of interest and the level of output. According to Keynes, "So long as there is unemployment, output and employment will change in the same proportion as the quantity of money, and when there is full employment, prices will change in the same proportion as the quantity of money." Thus Keynes integrated the theory of output with value theory and monetary theory and criticised Fisher for dividing economics "into two compartments with no doors and windows between the theory of value and theory of money and prices."

#### **8. V not Constant:**

Further, Keynes pointed out that when there is underemployment equilibrium, the velocity of circulation of money  $V$  is highly unstable and would change with changes in the stock of money or money income. Thus it was unrealistic for Fisher to assume  $V$  to be constant and independent of  $M$ .

#### **9. Neglects Store of Value Function:**

Another weakness of the quantity theory of money is that it concentrates on the supply of money and assumes the demand for money to be constant. In other words, it neglects the store-of-value function of money and considers only the medium-of-exchange function of money. Thus the theory is one-sided.

#### **10. Neglects Real Balance Effect:**

Don Patinkin has criticised Fisher for failure to make use of the real balance effect, that is, the real value of cash balances. A fall in the price level raises the real value of cash balances which leads to increased spending and hence to rise in income, output and employment in the economy. According to Patinkin, Fisher gives undue importance to the quantity of money and neglects the role of real money balances.

#### **11. Static:**

Fisher's theory is static in nature because of its such unrealistic assumptions as long run, full employment, etc. It is, therefore, not applicable to a modern dynamic economy.

In this chapter, we shall study the gold standard, bimetallism and paper standard.

### **THE GOLD STANDARD**

**Meaning:** The gold standard is a monometallic standard in which the value of the monetary unit is fixed in term of a specified weight and purity. As pointed out by Robertson,

“Gold standard is a state of affairs in which a country keeps the value of its monetary and the value of a defined weight of gold at an equality with one other.”Coulborn’s definition is simple. He writes, “The gold standard is an arrangement whereby the chief piece of money of a country is exchangeable with a fixed quantity of gold of a specified quality.”

### **Types of the Gold Standard**

The meanings of the gold standard, as given above, relates to its general form. But different at different times adopted different types of gold standard which are explained as under.

#### **1. Gold currency standard.**

This standard prevailed prior to 1914 in the UK, USA and certain countries. It was also known as the gold coin standard, gold circulation standard or full or pure gold standard. It had six main features: (i) gold coins of a definite weight and fineness circulated within the country. For instance, in England the sovereign was the gold coin which contained 123.2744 grams of gold of 11/12<sup>th</sup> purity. (ii) The gold coin (i.e. sovereign in Britain) was full and unlimited legal tender. (iii) Non-gold metallic and paper currency notes also circulated side by side but they were convertible on demand into gold coins at fixed rates, (iv) There was free coinage in gold. Any body could take gold or jewellery to the mint for coinage, (v) Gold coin could be freely minted for other purposes, (vi) Export and import of gold was free and unrestricted.

#### **2. Gold Bullion standard**

This standard was in operation in the UK between 1925 and 1931 and in India between 1927 and 1931. This monetary system had five distinguishing features: (i) Gold coins did not circulate within the country. The legal tender currency in circulation consisted of paper currency notes and token coins of silver and other metals. (ii) These were convertible at fixed rates into gold at bars or bullion. For instance, in England currency notes were convertible into gold bars containing 400 oz. of gold at the fixed price of 3-17s-10d per oz. of 11/12<sup>th</sup> fineness. When India adopted this system in 1927, rupee was convertible into gold bars containing 40 total at the price of Rs.27, 7 annas 10 pies per total. (iii) for converting currency into gold, the monetary authority was required to keep gold bars in reserve. (iv)The monetary authority also bought gold from the public at a fixed price. (v) Gold was freely exported and imported.

#### **2. Gold Exchange standard**

This was in operation in India between 1898 and 1913 and in a number of eastern countries which were poor and did not possess sufficient gold. But mostly such countries

were under the colonial rule and their currencies were linked with the currency of the ruling country. The principal features of this monetary system were: (i) Gold coins did not circulate within the country. (ii) The currency consisted of paper notes and token coins of silver and other metals. (iii) These were not convertible into gold coins or bullion, (iv) But the local currency was linked with some foreign currency which was on gold currency standard, (v) It was convertible into such foreign currency at a fixed rate. For instance, the Indian rupee coins were convertible into British sterling at the ratio of 1s-4d per rupee, (iv) Since the currency was indirectly linked with gold, prices of goods and services were consequently determined by the price of the gold, (vii) Gold could not be exported and imported freely. Only the monetary authority was authorized to export and import gold. But actually payments were made in the securities of the two countries. For instance, rupee and sterling securities were bought and sold in England and India respectively at the fixed exchange rate of 1s-4d per rupee.

### 3. **Gold Reserve standard**

England was the first country to abandon the gold standard in 1931, followed by the USA in 1933 and France in 1936. This led to instability in their exchange rates. To maintain exchange stability, they entered into the Tripartite Monetary Agreement in September 1936 and they were joined by the Netherlands, Belgium and Switzerland in the same year. This agreement came to be known as the gold reserve standard and worked successfully till the outbreak of the Second World War in September 1939. The main features of this system were: (a) There were no gold coins within the country, (b) The currency consisted of paper notes and token coins of cheap metals, (c) This currency was inconvertible into gold, (d) Under the Agreement, each country maintained an Exchange Equalisation Fund which kept gold, local currency and foreign exchange. (e) There was no free export or import of gold except by the authority for maintaining stability in the exchange rate. Such gold was meant to be kept in the fund. (f) There was strict secrecy about the reserves of gold and foreign exchange kept in the fund.

### 4. **Gold Parity Standard**

This system has emerged with the establishment of the International Monetary Fund in 1944. It does not possess any feature of the various gold standards explained above. Under this system, every country has to declare the par value of its monetary unit in terms of a fixed quantity of gold. So this is not gold standard in the real sense of the term, except that it aims at keeping the exchange rate of the currency stable in terms of gold.

“But whatever form the gold standard may take, its essential characteristic is that the currency is, either directly or at one move, either in volume or in value, linked to gold.

### **Rules of the Gold Standard**

The gold standard functioned smoothly before the First World War. In order to study its working it is essential the conditions for its success. These conditions have come to be known as the “*Rules of the games*”. The Macmillan Committee pointed out in this connection, “It is difficult to define in precise terms what is implied by the game. “The management of an international standard is an art and not a science, and no one would suggest that it is possible to draw up a formal code of action. Much must be left to time and circumstance.” But it recommended the following general principles for the successful working of the international gold standard.

1. It should involve a common agreement among nations as to the objectives for which it existed.
2. It should bring stability of prices and guarantee stability of exchange.
3. Individual central banks should avoid such action which might endanger stability of prices through their effects on the policy of other central banks.

Given these three principles the countries on the gold standard were expected to observe the following rules or conditions for its smooth working.

1. There should be free and unrestricted export and import of gold between countries.
2. The country receiving (importing) gold should expand credit within the country and the gold-exporting country should contract credit.
3. There should be a high degree of price, wages, income and cash flexibility in countries on the gold standard so that these change with gold movements. For instance, when gold flows into the country, money supply should increase which should lead to rise in prices, wages and income, and costs would be adjusted accordingly. The opposite would be the case in the event of the outflow of gold to other countries. It would lead to increase in money supply, fall in prices, wages, income and costs. Thus the success of the gold standard depends upon flexibility in the economic set-up of the economy.
4. The successful working of the gold standard presupposed the existence of free trade among nations. The gold standard was essentially a laissez-fair standard.
5. The country on the gold standard should strictly adhere to the policy of maintaining exchange stability and other objectives should be subservient to it.
6. There should be no disturbing large capital movements based on speculative activities. In fact, the smooth working of the gold standard depended to a large extent upon the degree

to which the movements of short-term funds could be influenced by changes in the bank rate.

7. Another condition was that the gold value of the domestic currency was to be kept stable. It should not be overvalued or undervalued.
8. Last but not the least, the success of the gold standard required normal times. That is why, it broke down during the First World War and the disturbed condition following the war.
9. The gold standard worked smoothly so long as the countries following these rules to the letter. As pointed out by Crowther, "This gold standard is a jealous god. It will work provided it is given exclusive devotion." This continued upto 1914 and after that when they started breaking these rules gradually, the gold standard broke down.

### **Working of the Gold Standard**

The question arises: how did the gold standard work or what was the mechanism of the gold standard? The answer to this question is related to the functioning of the gold standard before 1914.

All countries which were on the gold standard in the late 19<sup>th</sup> and early 20<sup>th</sup> century were inter-related and inter-dependent. A country having a favorable

Balance of trade received gold from other country, because it had excess of exports over imports. On the contrary, a country having a unfavorable trade suffered from the loss of gold on account of the excess of imports over exports. This movement of gold affected both the countries, the country with the inflow of gold and that having on outflow of gold.

The monetary reserves of the country with the gold inflow would increase. It would lead to an increase in the internal money supply of the country. The increased money supply was reflected in increased expenditures on goods and services. This led to rise in prices, wages, income, and costs. Consequently, the increase in the cost-price structure of the economy's domestically produced goods became relatively dearer in comparison with foreign goods. This tended to reduce exports and increase imports. Thus a surplus in the balance of payment of a country caused by a favorable balance of trade would be automatically corrected in the country with the gold inflow.

On the other hand, the reverse process would be repeated in the country with the gold outflow. The outflow of the gold would lead to decline in its monetary reserves. This would decrease the internal money supply of the country. As a result, prices declined along with wages, income, and costs. This made the domestically produced goods relatively cheaper than foreign goods. So exports increased and imports declined. Thus a deficit in the balance

of payments of country by an unfavorable balance of trade was automatically corrected in the country with gold outflow.

*The Deflationary Bias.* Whenever a country lost gold, it experienced falling prices. In fact, it was in the interest of the gold losing country to deflate prices. But it became difficult to bring revival once deflation started. If the country lost much gold during a short period of time, the deflating pressures along with the rise in the bank rate would bring a financial crisis. Since wages are rigid in the downward direction, it would lead to large scale unemployment. Once the economy was in deep depression, it was difficult to bring a revival with the efforts of the central bank. Considering all this, Mrs. John Robinson pointed out that the gold standard had an "inherent bias towards deflation.

There were two more reasons for the deflationary bias of the gold standard mechanism. First, trade took place between countries of unequal size. But gold standard presupposed trade relations between homogeneous countries of approximately equal size."Second, for others balance of payments were more important relative to their internal economy, while for others balance of payments had less importance. Naturally, countries which depended more on imports having large gold outflows tended to have deflationary bias.

Despite this deflationary bias, the gold standard functioned smoothly prior to 1914. This is because "the gold standard mechanism was ... never put to a really severe test. Major international interruptions were absent, the price-cost structures of the different countries were in conformity with the exchange rates and international capital movements served mainly to put sufficient reserves at the disposal of those countries which were, at the moment in need of it."

### **The Decline and fall of the Gold Standard**

The gold standard could work only if the "rules of the game" were observed which could be observed under normal conditions. But when the First World War broke out in 1914, the belligerent countries went off the gold standard because they had to suspend convertibility of currency into gold. They withdrew gold coins from circulation and replaced them by paper currency. England prohibited the melting of gold coins and the export of gold though it did not stop conversion of notes into gold coins. Some of the countries did make payments of the neutral

Countries in gold. During the war the belligerent countries suffered from inflation of varying degrees. But they could not be controlled because the countries could not observe the rules of the game. So the gold standard virtually broke down during the war period.



After the war, most countries suffered from inflation of varying degrees which made it difficult to fix gold value of domestic currency at pre-war rates. Prestige led Great Britain to return to the gold standard at the pre-war parity and it was commonly estimated that the pound was overvalued by 10 per cent. This was

Because the price level in Britain was higher than in America by this percentage. The actual exchange rate was fixed at  $\$4.866 = 1$  but the equilibrium rate was  $\$4.38 = 1$ . So England's goods were overpriced and of America's under-priced. This adversely affected British exports and favoured imports from America. But Italy overvalued its Lira and France undervalued its France. By 1928 the restoration of the gold standard was complete.

But it was not the gold standard which existed before the 1914 war. Rather, it was a truncated gold standard with failure of the government to follow the golden rules of the gold standard game. Consequently, with the beginning of the Great Depression in 1929, the final collapse of the gold standard began. Four south American countries were the first to go off the gold standard by the end of 1930. England, along with twenty two other countries, abandoned the gold standard in 1931. By the end of 1936, practically all countries had left the gold standard.

***Causes of the breakdown of the gold standard.*** Economics have pointed to a number of causes which led to the breakdown of the gold standard. First, the monetary authorities in the different countries were no longer exclusively devoted to the aims of the gold standard as they had been before the war. As put by Crowther, "gold standard is a jealous god. It will work provided it is given exclusive devotion." They were not prepared to follow the rules of the gold standard. After the restoration of the gold standard in 1920s, every country wanted to have price stability. But the primary objective of the gold standard was have exchange stability. So price stability was not compatible with the maintenance of the gold standard. Hence it broke down for failure to observe this golden rule of the game.

***Second,*** the technical task of maintaining exchange stability was more difficult than before the first World War. Exchange stability could be maintained by making adjustment in the internal price level of countries. But it was difficult to make constant readjustment in prices due to three reason: (i) The domestic currencies were either overvalued or undervalued; (ii) there was downward rigidity in the wage-cost structure in case of downward readjustment of prices; and (iii) readjustment were also difficult because the short-term funds of banks could not be influenced by change in the rate of interest. The short-term wfunds were affected more by speculation or fear than by the interest rate.

**Third**, the imposition of reparation and the insistence on the repayment of War debts from Germany made it difficult for the foreign market to be controlled by the gold standard. To pay Reparations and War debts, Germany had to buy dollars irrespective of its gold reserve position and the bank rate, and the countries which received such payments could not make adjustment accordingly.

**Forth**, almost every country imposed high tariffs. Imposition of high tariffs especially by the creditor countries restricted imports from debtor countries. This was a clear violation of the rule of the gold standard. When a debtor country was losing gold, it was essential for it to lower internal prices in order to expand exports. But high tariffs by the creditor countries prevented the expansion of exports and thus made adjustments in foreign exchange difficult. This led many countries to abandon the gold standard.

**Fifth**, the central banks failed to observe the gold rule: "expand credit when gold is coming in; contract credit when gold is going out." The United States and France, which were receiving gold did not expand credit sufficiently. On the other hand, Germany and Great Britain which were losing gold tried to make adjustments by borrowing from the gold-receiving countries. This meant the non-observance of the rule of the gold standard. There were, however, some immediate causes which led to the breakdown of the gold standard beginning from 1930.

(i) The first cause was the steep fall in the price levels of a number of countries. This brought a fall in the demand for exports and reduced the foreign exchange earning of exporting countries. These were the countries which depended on exports of raw materials whose prices fell sharply. Their exports earning declined considerably but they could not protect their gold reserve from falling as they continued to make gold payments for their international obligation.

(ii) The second immediate cause of the abandonment of the gold standard was the virtual cessation of international lending from 1929. We saw above that many debtor countries had borrowed from the United States to meet their international payments and protect their gold reserves during 1920-27. But with the coming in of the Great Depression, such countries stopped borrowing and found it difficult to make gold payments for their international obligation.

(iii) The last immediate cause was the presence of large short-term international debts against London and New York financial markets. These were payable on demand at short notice. A wave of fear caused the lenders of these short-term funds or "Hot Money" to ask for their repayments. It all started with the failure of the largest bank in Austria, the Credit

Anstalt in may 1931. This led to international banking panic in Germany, France, United States and Great Britain, where there were run on banks by creditors with the result that they stopped payments and froze credits in terms of gold. And the gold standard had finally ended. Hawtrey observes, "The immediate cause of the crisis, it is true, was the withdrawal of foreign money, first from Austria and Germany and then England, but this was the result of distrust, and the distrust was directly due to the appreciation of gold.

### **Merits of the Gold Standard**

The international gold standard which operated for more than three decades in different forms had certain merits.

#### 1. ***Inspired Public Confidence***

The gold standard inspired public confidence because the domestic currency was linked with gold. People knew that gold was an internationally accepted medium of payments, and a standard and a store of value. Therefore, they had full confidence in the paper currency which was convertible into gold bullion or coins or securities.

#### 2. ***No outside Interference***

The international gold standard had the merit of working without any outside interference by any other country or international authority.

#### 3. ***Automatic Operation.***

The gold standard functioned smoothly provided 'the rules of the game' were observed. These rules were not complex but easy to understand and follow for the countries. Thus the gold standard provided a simple and automatic monetary system to the countries of the world.

#### 4. ***Stable Exchange Rates***

Another merit of the gold standard was that it maintained stable exchange rates between countries. The exchange rate of every country was fixed in terms of its mint par or the gold value of its currency. The actual exchange rate between gold export and gold import points which took account of the cost of transporting gold from one country to the other. Thus the exchange rate was stable and fluctuations occurred only between the two gold points.

#### 5. ***Stable Internal Prices***

The gold standard secured relative stability of internal prices. When there was an inflow of gold, prices rose. And they fell with gold outflow. But when prices rose, exports diminished and imports increased. On the other hand, fall in prices led to expansion of exports and decline in imports. These opposite tendencies started gold outflow in the former

case and gold inflow in the later case. Ultimately, price stability was maintained in the trading countries.

#### 6. ***Check on Inflation.***

Under the gold standard the currency of a country was linked with gold and was convertible into it. As the issuing of currency was backed by specified quantity of gold, there was a limit up to which the authorities could issue currency. For every increase in the amount of the currency, gold reserves were also required to be increased to a given extent. There was also no fear of inflation, because the country could not increase the quantity of money in unlimited quantity. As against this, the present system of managed paper standard, having a fixed gold backing, leads the authorities to issue paper money in unlimited quantities thereby leading to inflation.

#### 7. ***Expansion of International Trade.***

The gold standard helped in the expansion of international trade. This was made possible by stable exchange rate and stable value of gold in countries. These led to the expansion of international trade and capital movements.

#### **Demerits of the Gold Standard**

Despite these merits, the actual working of the gold standard revealed a number of disadvantages which the countries of the world had to experience. Some of them were as under:

##### 1. **Fair Weather Standard**

Critics pointed out that the gold standard acted like a fair weather friend. It worked smoothly in normal or peace times first but failed during war or economic crises. Its actual working shows that it had to be suspended during the First World War and finally abandoned during the Great Depression. So it was a fair weather standard.

##### 2. **Not Automatic**

It is a misnomer to say that the gold standard worked automatically. In fact, all varieties of it had to be managed by the monetary authority or the central bank. The gold standard did not work automatically. The central bank had to change the bank rate in accordance with gold movements in order to affect the price level.

##### 3. **Exchange Stability at the Cost of Economic Stability**

One of the principal objectives of the gold standard was maintain exchange stability. But this was always attained at the cost of economic stability. When every time there were gold movements, the internal price level had to be adjusted accordingly in order to maintain exchange stability. These price fluctuations led to internal economic instability which

ultimately harmed the country. It is for this reason that now-a-days all countries prefer internal price stability to exchange stability.

#### 4. **Anarchy in world Credit Control**

Hawtrey characterized the gold standard as state of anarchy in world credit control. Since the gold standard was a laissez-faire standard and operated only under normal times, it failed miserably in conditions of severe inflation or deflation. During the First World War, inflation spread to all countries of the world. On the other hand, when depression started in 1929 it became a worldwide phenomenon. Thus the gold standard by itself was unable to control either inflation or deflation. Rather, it had to sacrifice itself at the altars of inflation and deflation.

#### 5. **Deflationary Bias**

According to Mrs. John Robinson, the standard had an inherent bias towards deflation. It was in the interest of the gold losing country to deflate prices, But once deflation started it became very difficult to bring revival even with the best efforts of the central bank. The long drawn depression of 1930s proved this fact without any shadow or doubt.

#### 6. **No Independent Policy**

A country of the gold standard could not follow an independent policy of its own. It had to follow that policy which was adopted by all other countries. Failure to follow a common policy alongwith other countries mean; abandoning the gold standard. This implied breaking of all trade relations with countries on the gold standard which could be harmful for the country.

#### 7. **Costly Standard**

The gold standard was a costly standard because it was based on gold. Every country had to circulate gold coins or keep gold reserves. As against this the paper standard is much cheaper and also economises the use of gold.

#### 8. **Rigid standard**

The gold standard was a rigid standard because for its success the rules of the game had to be observed in letter and spirit. A country could not increase the money supply to finance a war pr development activities or any financial emergency without increasing the gold reserves with its central bank. If it had to export gold to import the necessary equipment, raw materials and other goods it needed for war or development purposes. It was expected to reduce the internal price level by force in keeping with the rules of the gold standard game. Thus it was a highly rigid standard.

## 9. **Adverse Effects of Interest Rate Changes**

Under one of the rules of the gold standard, the central bank of the country was required to affect changes in the bank rate in keeping with the outflow of gold movements. When there was an inflow of gold, the bank rate was lowered, while it was raised with the outflow of gold. Such changes in interest rates were forced upon trade and industry simply to expand or reduce money income within the country. They, therefore, adversely affected trade and industry.

Taking in to account the various disadvantages of the gold standard enumerated above, it can be concluded that the gold standard was an unnecessary standard. The managed paper standard can secure on all the advantages enjoyed by the gold standard minus its disadvantages. That is why the gold standard is now a thing of the past and is only of academic interest, never to be restored again.

## **BIMETALLISM**

Bimetallism, also known as bimetallic standard, is a monetary system under which the monetary unit of the country is expressed by law in terms of two metals, usually gold and silver, in a specific ratio. They are unlimited legal tender. They are minted freely and in unlimited quantities free or with some charge. Both metals are imported and exported freely.

Bimetallism was in vogue in England throughout the 18<sup>th</sup> century. The United States adopted it in 1792, when the mint ratio between silver and gold was fixed at 15:1. France adopted it in 1803 followed by Belgium, Switzerland and Italy in 1865. With the growing popularity of the gold standard, it was abandoned by these European countries in 1874.

## **MERITS OF BIMETALLISM**

Bimetallism as monetary system had the following advantages:

1. ***Adequate Supply of Currency.*** One of the merits of bimetallic standard was that it ensured an adequate supply of currency within the country. As both gold and silver coins were in circulation and freely minted, there was no likelihood of both becoming short in supply simultaneously.
2. ***Price Stability.*** It was also argued that flexibility of money supply assured price stability. The internal price level was linked with the prices of gold and silver. And the prices of gold and silver depended upon their supply and demand.
3. ***Stable Price of Silver.*** In those days, the price of silver was falling and the silver producing countries were at a disadvantage in trading with gold standard countries. It was, therefore, felt that the adopting of bimetallic standard would increase the demand for silver and raise

its price. This would increase the purchasing power of silver-producing countries and also help in overcoming depression in them.

4. **Stable Exchange Rates.** The ratio of exchange between gold and silver was fixed, being determined by the value of silver. Therefore, there was no possibility of the market rate of exchange to deviate from the mint par rate of exchange.

5. **Encouragement to Foreign Trade.** First, due to exchange stability between countries, and second, a country on bimetallism could have trade relations with any country on bimetallism and on silver or gold standard.

6. **Easy to Keep Cash Reserves.** As both gold and silver coins were unlimited legal tender under bimetallism it was convenient and easy for commercial banks to keep minimum cash reserves against their liabilities either in gold or silver coins.

7. **Encouragement to Production.** The advocates of bimetallism condended that bimetallism as a monetary system was superior to the silver or gold standard because it encouraged production.

#### **DEMERITS OF BIMETALLISM**

The opponents of bimetallism give the following arguments against this monetary system.

1. **Inequality of Market Ratio and Mint Ratio.** The success of the bimetallic standard depended upon the maintenance of equality between ratio and mint ratio of gold and silver. But it was not possible to maintain this equality because of a strong tendency towards the continuous increase in the supply of one metal.

2. **Operation of Gresham's Law.** As a corollary to the above, when there was divergence between the mint ratio and the market ratio the Gresham's law would operate and bimetallism would breakdown.

3. **Not successful internationally.** It was argued that if bimetallism was adopted by many countries, it would be successful. But this presupposed the adoption of the same mint ratio between the gold and silver by all countries. But it was not possible to expect international cooperation on maintaining a uniform ratio in every country.

4. **No Price Stability.** The opponents of bimetallism dispute that flexibility of money led to price stability. According to them, there was no set rule that when the supply of one metal of the other metal would fall.

#### **PAPER CURRENCY STANDARD**

Paper currency standard consists of paper money which is unlimited legal tender and token coins of cheap metals. Paper money may be either convertible or inconvertible.

Convertible paper money is convertible into gold or silver coins or bullion of specified weight on demand. Paper money is not convertible into coins of a precious metal of bullion now-a-days. Therefore, it is inconvertible. People accept it because it is legal tender. Since it has command of the government, people have to accept it. That is why it is also known as *fiat* money or standard.

### **MERITS OF THE PAPER STANDARD**

The paper standard, which is universally used, has a number of merits:

1. ***Economical.*** The paper standard is cheaper than gold or silver standard. There is no need to waste gold or silver for coinage purpose. Rather precious metals can be used for productive purpose and for making payments to foreign countries. As paper money is not convertible, there is no need to keep gold in the form of reserves. The monetary authorities keep only a fixed quantity of gold in reserve for reason of security. Thus the paper standard is cheap and economical and even a poor country can easily adopt it.
2. ***Elastic.*** The paper standard is a highly useful monetary system because it possesses great elasticity. The monetary authority can easily adjust the money supply in accordance with the requirements of the economy. This was not possible under the gold standard. The supply of money can be increased by printing more notes in times of financial emergency, war, and for economic development. It can also be reduced when the economic situation so demands. Thus there is also freedom in the management of the money supply in the economic.
3. ***Price Stability.*** As a corollary to the above, the paper standard ensures price stability in the country. The monetary authority can stability the price level by maintaining equilibrium between demand and supply of money by an appropriate monetary policy.
4. ***Free form Cyclical Effects.*** The paper standard is free from the effects of business cycles arising in other countries. This merit was not available to other monetary standards, especially the gold standard, where cyclical movements in one country were automatically passed on to other countries through gold movements.
5. ***Full Utilization of Resources.*** The gold standard had a deflationary bias whereby the resource of the country remained unutilized. Whenever there was gold outflow prices fell and resources became unemployed. But this is not the case under the paper standard in which the monetary authority can manipulate the monetary policy in order to ensure full utilization of the country's resources.
6. ***Equilibrium in Exchange Rate.*** One of the merits of the paper standard is that it immediately restores equilibrium in the exchange rate of the country whenever



disequilibrium occurs in the demand and supply of its currency in the foreign exchange market.

7. **Portable.** It is very convenient to carry large sums of paper money from one place to another.
8. **Easy to Count.** It is easier to count paper money than metallic money.
9. **Easy to store.** It is easier to store large sums of paper money in a small space.
10. **Cognisable.** It is easy to recognise paper notes of different denominations.
11. **Replaceable.** Paper notes of one type and denomination can be easily replaced by printing notes of different types of the same denomination.

### **DEMERITS OF THE PAPER STANDARD**

Despite these merits, the paper standard has certain disadvantages:

1. **Inflationary Bias.** One of the serious defects of the paper standard is that it has an inflationary bias. As paper notes are inconvertible, there is every likelihood of the government printing notes in excess of the requirements. Or, the government may deliberately resort to the printing press to meet a financial emergency or war or even to meet ordinary budget deficits. This leads to excess of money supply and to inflation in the country.
2. **Price Stability a Myth.** It has been pointed out in the merits of the paper standard that it leads to price stability. In actuality, price stability is a myth as has been the experience of the majority of countries on the paper standard.
3. **Exchange Instability.** Another disadvantage of this system is that it leads to instability in exchange rates whenever there are large fluctuations in external prices. Such wide and violent fluctuations in exchange rates are harmful for the growth of international trade and capital movements among countries. These have led governments to adopt exchange control measures.
4. **Lacks Confidence.** Paper money lacks confidence as it is not backed by gold reserves.
5. **Lacks Durability.** Paper money has less durability than metallic coins. It can be easily destroyed by fire or insects.
6. **Unstable.** Paper money lacks stability because its supply can be changed easily.
7. **Uncertainty.** Instability in the value of paper money leads to uncertainty in the economy which adversely affects business and economic progress.
8. **Token Money.** Paper money is token money and in the event of demonetization of notes, they have no intrinsic value and are simply like waste paper.

9. *Not Automatic*. The paper currency standard does not operate automatically. It is a highly managed standard which requires much care and caution on the part of the monetary authority. A little carelessness may bring disaster to the economy.

## **COMMERCIAL BANKS**

### **Meaning**

The word 'bank' is used in the sense of a commercial bank. It is of Germanic origin though some persons trace its origin of the French word 'Banqui' and the Italian word 'Banca'. Chamber's Twentieth Century Dictionary defines a bank as an "institution of the keeping, lending and exchanging, etc. of money." Economists have also defined a bank highlighting its various functions. According to Crowther, "The banker's business is to take the debts of other people to offer his own in exchange, and thereby create money." A similar definition has been given by Kent who defines a bank as "an organization whose principal operations are concerned with the accumulation of the temporarily idle money of the general public for the purpose of advancing to others for expenditure. Sayers, on the other hand, gives a still more detailed definition of a bank thus: "Ordinary banking business consists of changing cash for bank deposits and bank deposits for cash; transferring bank deposits from one person or corporation (one 'depositor') to another; giving bank deposits in exchange for bills of exchange, government bonds, the secured or unsecured promises of businessmen to repay, etc." thus a bank is an institution which accepts deposits from the public and in turn advances loans by creating credit. It is different from other financial institutions in that they cannot create credit though they may be accepting deposits and making advances.

### **Functions of Commercial Banks**

Commercial banks perform a variety of functions which can be divided as: (1) accepting deposits; (2) advancing loans; (3) Credit creation; (4) financing foreign trade; (5) agency services; and (6) miscellaneous services to customers. These functions are discussed as follows:

#### **1. Accepting Deposits**

This is the oldest function of a bank and the banker used to charge a commission for keeping the money in its custody when banking was developing as an institution. Nowadays a bank accepts three kinds of deposits from its customers. The first is the savings deposits on which the bank pays small interest to the deposits who are usually small savers. The depositors are allowed to draw their money by cheques up to a limited amount during a week or year. Deposits are also accepted by a bank in fixed or time deposits. Savers who do not need money for a stipulated period from 6 months to longer periods ranging up to 10 years or

more are encouraged to keep it in fixed deposit accounts. The bank pays a higher rate of interest on such deposits.

## **2. Advancing Loans**

One primary function of a commercial bank is to advance loans to its customers. A bank lends a certain percentage of the cash lying in deposits on a higher interest rate than pay on such deposits. This is how it earns profit and carries on its business. The bank advances loans in the following ways:

(a) **Cash Credit.** The bank advances loan to businessmen against certain specified securities. The amount of the loan is credited to the current account of the borrower. In case of a new customer a loan account for the sum is opened. The borrower can withdraw money through cheques according to his requirements but pays interest on the full amount.

(b) **Call Loans.** These are very short-term loans advanced to the bill broken for not more than fifteen days. They are advanced against first class bill or securities. Such loans can be recalled at a very short notice. In normal times they can also be renewed.

(c) **Overdraft.** A bank often permits a businessman to draw cheques for a sum greater than the balance lying in his current account. This is done by providing the overdraft sanctioned to by him the banks.

(d) **Discounting Bills of Exchange.** If a creditor holding a bill of exchange wants money immediately, the bank provides him the money by discounting the bill of exchange. It deposits the amount of the bill in the current account of the bill-holder after deducting its rate of interest for the loan which is not more than 90 days. When the bill of exchange matures, the bank gets its payment from the banker of the debtor who accepted the bill.

## **3. Credit Creation**

Credit creation is one of the most important functions of the commercial banks. Like other financial institutions, they aim at earning profits. For this purpose, they accept deposits and advance loans by keeping a small cash in reserve for day-to-day transaction. When a bank advances a loan, it opens an account in the name of the customer and does not pay him in cash. It allows him to draw the money by cheque according to his needs. By granting a loan, the bank creates credit or deposit.

## **4. Financing Foreign Trade**

A commercial bank finances foreign trade of its customers by accepting foreign bills of exchange and collecting them from foreign banks. It also transacts other foreign exchange business and buys and sells foreign currency.

## **5. Agency Services**

A bank acts as an agent of its customers in collecting and paying cheques, bills of exchange, drafts, dividends, etc. It also buys and sells shares, securities, debentures, etc. for its customers. Further, it pays subscribing, insurance premia, rent, electric and water bills, and other similar charges on behalf of its clients. It also acts as a trustee and executor of the property and will of its customers. Moreover, the bank acts as an income tax consultant to its clients. For some of these services, the bank charges a normal fee while it renders others free of charge.

## **6. Miscellaneous Services**

Besides the above noted services, the commercial bank performs a number of other services. It acts as the custodian of the valuables of its customers by providing them lockers where they can keep their jewellery and valuable documents. It issues various forms of credit instruments, such as cheques, drafts, travelers' cheques, etc. which facilitates transactions. The bank also issues letter of credit and acts as a referee to its client.

## **Role of Commercial Banks in a Developing Country**

Besides performing the usual commercial banking functions, banks in developing countries play an effective role in their economic development. The majority of people in such countries are poor, unemployed and engaged in traditional agriculture. There is acute shortage of capital. People lack initiative and enterprise. Means of transport are undeveloped. Industry is depressed. The commercial banks help in overcoming these obstacles and promoting economic development. The role of a commercial bank in a developing country is discussed as under.

### **1. Mobilizing Saving for Capital Formation**

The commercial banks help in mobilizing savings through network of branch banking. People in developing countries have low incomes but the banks induce them to save by introducing variety of deposit schemes to suit the needs of individual depositors. They also mobilize idle savings of the few rich. By mobilizing savings, the banks channelize them into productive investments. Thus they help in the capital formation of a developing country.

### **2. Financing Industry**

The commercial banks finance the industrial sector in a ways. They provide short-term, medium and long-term loans to industry. In India they provide short-term loans.

### **3. Financing Trade**

The commercial banks help in financing both internal and external trade. The banks provide loans to retailers and wholesalers to stock goods in which they deal. They also help

in the movement of goods from one place to another by providing all types of facilities such as discounting and accepting bills of exchange, providing overdraft facilities, issuing drafts, etc...

#### 4. Financing Agriculture

The commercial banks help the large agriculture sector in developing countries in a number of ways. They provide loans to traders in agriculture commodities. They open a network of branches in rural areas to provide agriculture credit. They provide finance directly to agriculturists for the marketing of their produce, for the modernization and mechanization of their farms, for providing irrigation facilities, for developing land, etc. They also provide financial assistance for animal husbandry, dairy farming, sheep breeding, poultry farming and horticulture. The small and marginal farmers and landless agriculture workers, artisans and petty shopkeepers in rural areas are provide financial assistance through the regional rural banks in India. Thus the commercial banks meet the credit requirements of all types of rural people.

#### 5. Financing Consumer Activities

People in underdeveloped countries being poor and having low incomes do not possess sufficient financial resource to buy durable consumer goods. The commercial banks advance loans to consumers for the purchase of such items as houses, Scooters, fans, refrigerators, etc. In this way, they also help in raising the standard of living of the people in developing countries by providing loans consumptive activities.

#### 6. Financing Employment Generating Activities

The commercial banks finance employment generating activities in developing countries. They provide loans for the education of young persons studying in engineering, medical and other vocational institutes of higher learning. They advance loans to young entrepreneurs, medical and engineering graduates, and other technically trained persons in establishing their own business. Such loan facilities are being provide by a number of commercial banks in India. Thus the banks not only help inhuman capital formation but also in increasing entrepreneurial activities in developing countries.

#### 7. Help in Monetary Policy

The commercial banks help the economic development of a country by faithfully following the monetary policy of the central bank. In fact, the central bank depends upon the commercial banks for the success of its policy of monetary management in keeping with requirements of a developing economy.

Thus the commercial banks contribute much the growth of a developing economy by granting loans to agriculture, trade and industry, by helping in physical and human capital formation and by following the monetary policy of the country.

### **NATURE OF CENTRAL BANKING**

The basic nature of Central Banking can be enumerated as follows:

1. The Central Bank does not aim at profits but aims at national welfare.
2. The Central Bank does not compete with the member banks.
3. The Central Bank has special relationship with government and with commercial banks.
4. The Central Bank is generally free from political influence.
5. The Central Bank is the apex body of the banking structure of the country.
6. The Central Bank should have overall control over the financial system.

### **Quantitative and Qualitative Measures of Credit Control**

Credit control is most important function of Reserve Bank of India. Credit control in the economy is required for the smooth functioning of the economy. By using credit control methods RBI tries to maintain monetary stability. There are two types of methods:

1. Quantitative control to regulates the volume of total credit.
2. Qualitative Control to regulates the flow of credit

Here is a brief description of the quantitative and qualitative measures of credit control used by RBI.

#### **Quantitative Measures**

The **quantitative measures** of credit control are as follows:

##### **Bank Rate Policy**

The bank rate is the Official interest rate at which RBI rediscounts the approved bills held by commercial banks. For controlling the credit, inflation and money supply, RBI will increase the Bank Rate.

##### **Open Market Operations**

Open Market Operations refer to direct sales and purchase of securities and bills in the open market by Reserve bank of India. The aim is to control volume of credit.

##### **Cash Reserve Ratio**

Cash reserve ratio refers to that portion of total deposits in commercial Bank which it has to keep with RBI as cash reserves.

## Statutory Liquidity Ratio

SLR refers to that portion of deposits with the banks which it has to keep with itself as liquid assets (Gold, approved govt. securities etc.) If RBI wishes to control credit and discourage credit it would increase CRR & SLR.

## Qualitative Measures

Qualitative measures are used by the RBI for selective purposes. Some of them are

### Margin requirements

This refers to difference between the securities offered and amount borrowed by the banks.

### Consumer Credit Regulation

This refers to issuing rules regarding down payments and maximum maturities of instalment credit for purchase of goods.

### RBI Guidelines

RBI issues oral, written statements, appeals, guidelines, warnings etc. to the banks.

### Rationing of credit

The RBI controls the Credit granted / allocated by commercial banks.

### Moral Suasion

Psychological means and informal means of selective credit control.

### Direct Action

This step is taken by the RBI against banks that don't fulfil conditions and requirements. RBI may refuse to rediscount their papers or may give excess credits or charge a penal rate of interest over and above the Bank rate, for credit demanded beyond a limit.

Under Selective Credit Control, credit is provided to selected borrowers for selected purpose, depending upon the use to which the control tries to regulate the quality of credit - the direction towards the credit flows. The Selective Controls are

1. **Ceiling on Credit**

The Ceiling on level of credit restricts the lending capacity of a bank to grant advances against certain controlled securities.

2. **Margin Requirements**

A loan is sanctioned against Collateral Security. Margin means that proportion of the value of security against which loan is not given. Margin against a particular security is reduced or increased in order to encourage or to discourage the flow of credit to a particular sector. It varies from 20% to 80%. For agricultural commodities it is as high as 75%. Higher the margin lesser will be the loan sanctioned.

### 3. **Discriminatory Interest Rate (DIR)**

Through DIR, RBI makes credit flow to certain priority or weaker sectors by charging concessional rates of interest. RBI issues supplementary instructions regarding granting of additional credit against sensitive commodities, issue of guarantees, making advances etc.

### 4. **Directives**

The RBI issues directives to banks regarding advances. Directives are regarding the purpose for which loans may or may not be given.

### 5. **Direct Action**

It is too severe and is therefore rarely followed. It may involve refusal by RBI to rediscount bills or cancellation of license, if the bank has failed to comply with the directives of RBI.

### 6. **Moral Suasion**

Under Moral Suasion, RBI issues periodical letters to bank to exercise control over credit in general or advances against particular commodities. Periodic discussions are held with authorities of commercial banks in this respect.

## **What is the Importance of Qualitative Methods of Credit Control?**

The qualitative or selective methods of credit control are adopted by the Reserve Bank in its pursuit of economic stabilization and as part of credit management.

### **1. Margin Requirements:**

Changes in margin requirements are designed to influence the flow of credit against specific commodities. The commercial banks generally advance loans to their customers against some security or securities offered by the borrowers and acceptable to banks.

More generally, the commercial banks do not lend upto the full amount of the security but lend an amount less than its value.

The margin requirements against specific securities are determined by the Reserve Bank. A change in margin requirements will influence the flow of credit. A rise in the margin requirements results in a contraction in the borrowing value of the security and similarly, a fall in the margin requirements results in expansion in the borrowing value of the security.

### **2. Credit Rationing:**

Rationing of credit is a method by which the Reserve Bank seeks to limit the maximum amount of loans and advances, and also in certain cases fix ceiling for specific categories of loans and advances.



### 3. Regulation of Consumer Credit:

Regulation of consumer credit is designed to check the flow of credit for consumer durable goods. This can be done by regulating the total volume of credit that may be extended for purchasing a specific durable goods and regulating the number of instalments through which such loan can be spread. Reserve Bank uses this method to restrict or liberalise loan conditions accordingly to stabilise the economy.

### 4. Moral Suasion:

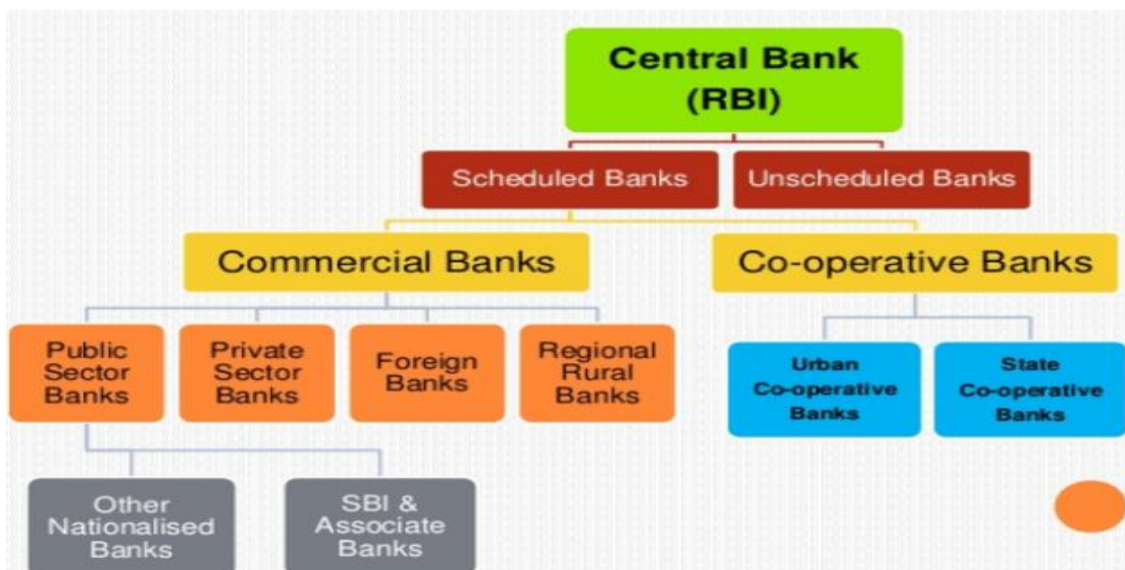
Moral suasion and credit monitoring arrangement are other methods of credit control. The policy of moral suasion will succeed only if the Reserve Bank is strong enough to influence the commercial banks.

In India, from 1949 onwards the Reserve Bank has been successful in using the method of moral suasion to bring the commercial banks to fall in line with its policies regarding credit. Publicity is another method whereby the Reserve Bank makes direct appeal to the public and publishes data which will have sobering effect on other banks and the commercial circles.

### Roles & Functions of Reserve Bank of India – Introduction

India is one of the **fastest growing economies** in the world, with a population over 1.2 Billion, has become the hub for global investment. There are various factors that influence and control Indian economy, one such being, The RBI, **one of the oldest institution** behind the success of our economy.

The **RBI is the backbone of Indian economy** and because of it, growth in Exports, FOREX, Capital Markets and other sectors of the economy are all happening. It plays an important role in strengthening, developing and diversifying the country's economic and financial structure. It is the apex bank in the **Indian Banking System**.



The Reserve Bank of India (RBI) is **India's Central banking institution**, which controls the monetary policy of the Indian rupee. The Reserve Bank of India was established on April 1, 1935, in accordance with the provisions of the Reserve Bank of India Act, 1934. Though originally privately owned, since nationalisation in 1949, the Reserve Bank is fully owned by the Government of India.

### **Functions of Reserve Bank of India in Indian Banking System**

1. **Monetary Authority:** It controls the supply of money in the economy to stabilize exchange rate, maintain healthy balance of payment, attain financial stability, control inflation, strengthen banking system
2. **The issuer of currency:** The objective is to maintain the currency and credit system of the country to maintain the reserves. It has the sole authority in India to issue currency. It also takes action to control the circulation of fake currency.
3. **The issuer of Banking License:** As per Sec 22 of Banking Regulation Act, every bank has to obtain a Banking license from RBI to conduct banking business in India.
4. **Banker's to the Government:** It acts as banker both to the central and the state governments. It provides short-term credit. It manages all new issues of government loans, servicing the government debt outstanding and nurturing the market for government's securities. It advises the government on banking and financial subjects.
5. **Banker's Bank:** RBI is the bank of all banks in India as it provides the loan to banks/bankers, accept the deposit of banks, and rediscount the bills of banks.
6. **Lender of last resort:** The banks can borrow from the RBI by keeping eligible securities as collateral at the time of need or crisis.
7. **Banker and debt manager of government:** RBI keeps deposits of Governments free of interest, receives and makes payment, carry exchange remittances, and help to float new loans and manage public debt, act as an advisor to Government.
8. **Money supply and Controller of Credit:** To control demand and supply of money in Economy by Open Market Operations, Credit Ceiling, etc. RBI has to meet the credit requirements of the rest of the banking system. It needs to maintain price stability and a high rate of economic growth.
9. **Act as clearinghouse:** For settlement of banking transactions, RBI manages 14 clearing houses. It facilitates the exchange of instruments and processing of payment instructions.
10. **Manager of foreign exchange:** It acts as a custodian of FOREX. It administers and enforces the provision of Foreign Exchange Management Act (FEMA), 1999. RBI

buys and sells foreign currency to maintain the exchange rate of Indian rupee v/s foreign currencies.

11. **Regulator of Economy:** It controls the money supply in the system, monitors different key indicators like GDP, Inflation, etc.
12. **Managing Government securities:** RBI administers investments in institutions when they invest specified minimum proportions of their total assets/liabilities in government securities.
13. **Regulator and Supervisor of Payment and Settlement systems:** The Payment and Settlement systems Act of 2007 (PSS Act) gives RBI oversight authority for the payment and settlement systems in the country. RBI focuses on the development and functioning of safe, secure and efficient payment and settlement mechanisms.
14. **Developmental Role:** This role includes the development of the quality of banking system in India and ensuring that credit is available to the productive sectors of the economy. It provides a wide range of promotional functions to support national objectives. It also includes establishing institutions designed to build the country's financial infrastructure. It also helps in expanding access to affordable financial services and promoting financial education and literacy
15. **Publisher of monetary data and other data:** RBI maintains and provides all essential banking and other economic data, formulating and critically evaluating the economic policies in India. RBI collects, collates and publishes data regularly.
16. **Exchange manager and controller:** RBI represents India as a member of the International Monetary Fund [IMF]. Most commercial banks are authorized dealers of RBI
17. **Banking Ombudsman Scheme:** RBI introduced the Banking Ombudsman Scheme in 1995. Under this scheme, the complainants can file their complaints in any form, including online and can also appeal to the RBI against the awards and the other decisions of the Banking Ombudsman
18. **Banking Codes and Standards Board of India:** To measure the performance of banks against Codes and standards based on established global practices, the RBI set up the Banking Codes and Standards Board of India (BCSBI).
19. **Fair Practices Codes For Lenders:-** RBI formulated the Fair Practices Code for Lenders which was communicated to banks to safeguard the rightful interest of the borrowers

### **Role of RBI in Economic Development**

1. Development of banking system
2. Development of financial institutions
3. Development of backward areas
4. Economic stability
5. Economic growth
6. Proper interest rate structure

### **Promotional Role of RBI**

1. Promotion of commercial banking
2. Promotion of cooperative banking
3. Promotion of industrial finance
4. Promotion of export finance
5. Promotion of credit to weaker sections
6. Promotion of credit guarantees
7. Promotion of differential rate of interest scheme
8. Promotion of credit to priority sections including rural & agricultural sector

### **Supervisory Functions of Reserve Bank of India**

1. Granting license to banks & controlling the opening of new branches
2. Bank Inspection
3. Control over Non-Bank Financial Institutions: The Non- Bank Financial Institutions are not influenced by the working of a monetary policy. RBI has a right to issue directives to the NBFIs from time to time regarding their functioning.
4. Implementation of the Deposit Insurance Scheme: In order to protect the deposits of small depositors, RBI work to implement the Deposit Insurance Scheme in case of a bank failure. (For bank deposits below 1 Lakh.)

### **Prohibitory Functions of Reserve Bank of India**

1. It cannot provide any direct financial assistance to any industry, trade or business
2. It cannot purchase its own share
3. It cannot purchase shares of any commercial and industrial undertaking
4. It cannot purchase any immovable property
5. It cannot give loans on the security of shares and property

### **Functions of Reserve Bank of India – General Terms**

- **Monetary policy** refers to the use of certain regulatory tools under the control of the RBI in order to regulate the availability, cost and use of money and credit.

- **Cash Reserve Ratio (CRR):** Banks are required to hold a certain proportion of their deposits in the form of cash with RBI. RBI uses CRR either to drain excess liquidity from the economy or to release additional funds needed for the growth of the economy.
- **Statutory Liquidity Ratio (SLR):** SLR is the amount that commercial banks are required to maintain in the form of gold or government approved securities before providing credit to the customers.
- **Repo Rate:** The rate at which the RBI is willing to lend to commercial banks is called Repo Rate. Whenever banks have any shortage of funds they can borrow from the RBI, against securities. If the RBI increases the Repo Rate, it makes borrowing expensive for banks and vice versa. As a tool to control inflation, RBI increases the Repo Rate, making it more expensive for the banks to borrow from the RBI with a view to restricting the availability of money. Similarly, the RBI will do the exact opposite in a deflationary environment.
- **Reverse Repo Rate:** The rate at which the RBI is willing to borrow from the commercial banks is called reverse repo rate. If the RBI increases the reverse repo rate, it means that the RBI is willing to offer lucrative interest rate to banks to park their money with the RBI. This results in a decrease in the amount of money available for banks customers as banks prefer to park their money with the RBI as it involves higher safety. This naturally leads to a higher rate of interest which the banks will demand from their customers for lending money to them.

**The Repo Rate and the Reverse Repo Rate are important tools with which the RBI can control the availability and the supply of money in the economy.**

**Fiscal Policy:** It is related to direct taxes and government spending. When direct taxes increased and government spending increased than the disposable Income of the people reduces and hence the demand reduces.

- On the basis of an assessment of the current and evolving macroeconomic situation at its meeting today, the Monetary Policy Committee (MPC) decided to keep the policy repo rate under the liquidity adjustment facility (LAF) unchanged at 6.0 percent.
- Consequently, the reverse repo rate under the LAF remains at 5.75 percent, and the marginal standing facility (MSF) rate and the Bank Rate at 6.25 percent.
- The decision of the MPC is consistent with a neutral stance of monetary policy in consonance with the objective of achieving the medium-term target for consumer

price index (CPI) inflation of 4 percent within a band of +/- 2 percent while supporting growth.

Policy Repo Rate	6.00%
Reverse Repo Rate	5.75%
Marginal Standing Facility Rate	6.25%
Bank Rate	6.25%
CRR	4%
SLR	19.5%
Base Rate	8.95% – 9.45%
MCLR	7.70% – 8.05%
Savings Deposit Rate	3.50% – 4.00%
Term Deposit Rates > 1 year	6.00% – 6.75%

## **UNIT IV**

### **FOREIGN TRADE**

#### **International trade**

The exchange of goods or services along international borders. This type of trade allows for a greater competition and more competitive pricing in the market. The competition results in more affordable products for the consumer. The exchange of goods also affects the economy of the world as dictated by supply and demand, making goods and services obtainable which may not otherwise be available to consumers globally.

International trade is the exchange of goods and services between countries. This type of trade gives rise to a world economy, in which prices, or supply and demand, affect and are affected by global events. Political change in Asia, for example, could result in an increase in the cost of labor, thereby increasing the manufacturing costs for an American sneaker company based in Malaysia, which would then result in an increase in the price that you have to pay to buy the tennis shoes at your local mall. A decrease in the cost of labor, on the other hand, would result in you having to pay less for your new shoes.

Trading globally gives consumers and countries the opportunity to be exposed to goods and services not available in their own countries. Almost every kind of product can be found on the international market: food, clothes, spare parts, oil, jewelry, wine, stocks, currencies, and water. Services are also traded: tourism, banking, consulting and transportation. A product that is sold to the global market is an export, and a product that is bought from the global market is an import. Imports and exports are accounted for in a country's current account in the balance of payments.

#### **The theory of comparative cost**

The fundamental cause of international specialisation and hence international trade is the difference in costs of production.

It is the relative differences in costs which determine the products to be produced by different countries. Considering climatic conditions, availability of mineral and other resources and differences in costs arising from them, every country seems to be better suited for the production of certain articles rather than for others.

A country tends to specialise in the production of those goods for which it has got relative or comparative advantage. A country can produce numerous goods. But it will not produce all of them since it will simply not be paying to do so. It will be much better if after comparing the

costs of the various articles that it can produce, it selects those in which the comparative costs are lower or in which it enjoys relative advantage.

It will be to the advantage of each country as well as of the world as a whole that each country specialises in the production of those commodities for which it has comparative advantage. In this way the productive resources of the country and of the whole world will be optimally utilised.

The theory of comparative costs is simply an application of the principle of division of labour to different countries. An individual can do a number of jobs but he cannot do them all alike. Take the case of a doctor. Undoubtedly, he can do the dispensing work better than his dispenser.

But still he employs a dispenser, and he himself specialises in examining the patients. He knows that the time which he will spend in dispensing can be more remuneratively employed by examining patients. The work of dispensing can be done by a low-paid person, while he can earn much more as a doctor.

Similarly, a professor may be able to teach his own son who is reading in a lower class much better than any school teacher. But if the hour that he devotes to the teaching of his son is devoted to coaching of a student for the degree examination, he will get much more payment than he has to pay a tutor whom he may employ for coaching his son.

This specialisation is very gainful. This is the application of the theory of comparative costs to the case of individuals. Each individual compares the cost and the income of the various jobs that he could take up and of these he selects that one which is most profitable.

Now, let us see how this principle applies to international specialisation. The fundamental cause as to why international specialisation occurs is the differences in costs, which result from the differences in the availability of the amount and the quality of resources, the prices of these resources or factors and the method of their use. Considering the differences in costs of producing different goods, every country seems to be better suited for the production of certain goods rather than the others.

A country tends to specialise in the production of those goods in which it has got comparative advantage or lower comparative cost. A country can produce many goods. But it will not produce all of them since it will simply not be paying to do so. It will be much better if after comparing the costs of the various goods which it can produce it selects those in which the comparative costs are lower or in which it enjoys comparative advantage.

It will be to the advantage of each country as well as of the world as a whole that each country specialises in the production of those commodities for which it has comparative



advantage. In this way the productive resources of the country will be optimally utilised. It is worth mentioning that specialisation necessitates trade or exchange of goods with other countries.

Under specialisation, a H country will import a good it does not produce and exports the good in which it specialises. The advantage of having a country specialise in the production of the good which it can produce more efficiently and exporting some of it in exchange for the imports of the good it can produce relatively less efficiently is that such specialisation increases the total supply of goods. In this way both countries are able to increase their level of consumption beyond what is possible in the absence of specialisation.

Let us take two countries U.S.A. and India and two goods, wheat and cloth. We shall explain what would be the basis of trade between these two countries and how the two would gain from specializing and trading with each other on the basis of comparative advantage or comparative cost.

**In order to simplify our analysis, we make the following assumptions:**

1. There are no transport costs between the two countries.
2. Conditions of perfect competition prevail in both countries.
3. Labour is the only resource of production and prices of products are equal to their relative labour costs.
4. There is free trade between the countries.

**Specialisation and Trade with Comparative Advantage:**

When each country has an absolute advantage over the other in the production of a commodity, the gain from specialisation and trading between countries is quite obvious. However, a pertinent question is if the U.S.A. can produce both the commodities wheat and cloth more efficiently than India, would she gain from specialisation and trading with India.

In fact, it was this question which was raised by David Ricardo, a classical economist, who put forward the theory of comparative costs (advantage) as an explanation of the potential gain from international trade. Let us illustrate the theory of comparative cost (or comparative advantage) with a numerical example. Taking two countries, two commodities model as used by Ricardo we give in table labour requirements per unit of cloth and wheat in the U.S.A. and India.

Table	Man-hours Required to Produce One Unit of Wheat and Cloth		Domestic Exchange Ratio between Wheat and Cloth
	Wheat	Cloth	
U.S.A.	3	6	1 Wheat = 0.5 Cloth
India	12	9	1 Wheat = 1.33 Cloth

It will be seen from Table that U.S.A. is more efficient (or has absolute advantage) in the production of both wheat and cloth. To produce one unit of wheat the U.S.A. requires 3 man-hours, while India requires 12 man-hours. In case of cloth, to produce one unit of it 6 hours of labour are needed in the USA, while 9 hours are needed in India.

It is thus evident that the U.S.A. is more efficient in the production of both the commodities as it produces them at a lower labour cost than India. That is, U.S.A. has an absolute advantage in the production of both the commodities. However, Ricardo argued that the two countries can still gain from specializing and trading between them if they produce according to their comparative advantage.

It will be seen from above table that the U.S.A. is four times more efficient in the production of wheat as compared to India, while its efficiency in the production of cloth is 1.5 times greater than India. Thus, while U.S.A. has absolute advantage in the production of both wheat and cloth, it has a comparative advantage in the production of wheat.

On the other hand, India is less efficient in the production of both wheat and cloth, its inefficiency is comparatively less in cloth. India is said to have comparative advantage in the production of cloth. Both the countries will be better off if the U.S.A. specialises in the production of wheat and exports it to India for import of cloth and India specialises in the production of cloth and exports it to the U.S.A. and import wheat from it.

It might appear that the U.S.A. which can produce both wheat and cloth more efficiently than India has nothing to gain by trading with India which is comparatively inefficient in the production of both wheat and cloth. Even though the U.S.A. is more efficient in the production of both wheat and cloth, she will still gain by having specialisation and trading with India.

Let us see how the two countries will gain if they specialise and trade on the lines of comparative advantage. In the absence of trade between the U.S.A. and India, depending on their labour costs one unit of wheat will be exchanged for 0.5 units of cloth in the U.S.A. and 1.33 units of cloth in India.

When the U.S.A. and India specialise in wheat and cloth respectively and trade takes place between them, the U.S.A. will gain if it has to give less than can get more than 0.5 units of

cloth from India for one unit of wheat and India will gain if it 1.33 units of cloth to the U.S.A. for import of one unit of wheat.

Hence any exchange ratio between 0.5 and 1.33 units of cloth against one unit of wheat represents a gain for both the countries. The actual exchange rate settled between them will be determined by the reciprocal demand of the two countries for wheat and cloth.

Now, the question is what will be the source of gain from specialisation in the present case. The answer to this is that whereas the U.S.A. has an absolute advantage in the production of both wheat and cloth, its margin of advantage is greater in case of wheat as compared to cloth.

Likewise, although India has absolute disadvantage in the production of both wheat and cloth, the extent of its disadvantage is less in case of cloth. Thus, with increases U.S.A. specialising in the production of wheat and India in cloth, through reallocation of labour between wheat and cloth, the total production will increase.

How does the total joint output of the two countries increases if U.S.A. specialises in wheat for which it has comparative advantage and India in cloth for which it enjoys comparative advantage ? We show below in Table the gain in wheat output that occurs when U.S.A. shifts its labour resources by reducing the production of cloth by one unit and India shifts its labour to cloth by reducing the production of wheat by one unit (the above data of man-hours cost of wheat and cloth are used).

Table	Gain in Output Resulting From Shift of Labour		
	<i>U.S.A.</i>	<i>India</i>	<i>World output</i>
Wheat	+ 2 Wheat	- 1 Wheat	+ 1 Wheat
Cloth	- 1 Cloth	+ 1.33 cloth	+ 0.33 Cloth

It will be seen from two Tables that if U.S. A. reduces the production of cloth by one unit 6 man-hours of labour will be released and if these are used for the production of wheat it will gain 2 units of wheat production. On the other hand, if India reduces production of one unit of wheat, 12 hours of labour will be released which on using for cloth production will result in gain of 1.33 units of cloth.

It will be seen from Table that total world output (i.e. joint output of the two countries) will rise by 1 unit of wheat and 0.33 units of cloth as a result of the above shift of man-hours to the products of their comparative advantage.

Thus, specialisation, according to the comparative advantage, would lead to the increase in production of both wheat and cloth and the two countries would gain from trading with each other by exporting the goods in which they specialize.

## **Balance of trade and Balance of Payments**

Balance of payments is the overall record of all economic transactions of a country with the rest of the world.

Balance of trade is the difference in the value of exports and imports of only visible items. Balance of trade includes imports and exports of goods alone i.e., visible items.

### **Difference between Balance of Trade (BOT) and Balance of Payment (BOP)**

#### **Balance of Trade (BOT)**

- i. It records only merchandise (i.e., goods) transactions.
- ii. It does not record transactions of capital nature.
- iii. It is a part of current account of BOP.
- iv. It may be favourable, unfavourable or in equilibrium.
- v. Defect in BOT cannot be met by BOP
- vi. It is not true indicator of economic relations or economic prosperity of a country.

#### **Balance of Payment (BOP)**

- (i) It records transactions relating to both goods and services.
- (ii) It records transactions of capital nature.
- (iii) It includes balance of trade, balance of services, balance of unilateral transfers and balance of capital transactions.
- (iv) It always remains in balance in the sense that receipt side is always made to be equal to payment side.
- (v) Defect in BOP can be met through BOT.
- (vi) It is true indicator of economic performance of an economy.

### **Free trade and protection**

Actually speaking, a strong wind was then blowing in favour of free trade. International Monetary Fund (IMF) and the World Bank also pampered the free trade philosophy.

#### **I. Free Trade:**

International trade that takes place without barriers such as tariff, quotas and foreign exchange controls is called free trade. Thus, under free trade, goods and services flow between countries freely. In other words, free trade implies absence of governmental intervention on international exchange among different countries of the world.

**There are many arguments for free trade:**

**1. Arguments for Free Trade:**

**(i) Advantages of specialisation:**

Firstly, free trade secures all the advantages of international division of labour. Each country will specialise in the production of those goods in which it has a comparative advantage over its trading partners. This will lead to the optimum and efficient utilisation of resources and, hence, economy in production.

**(ii) All-round prosperity:**

Secondly, because of unrestricted trade, global output increases since specialisation, efficiency, etc. make production large scale. Free trade enables countries to obtain goods at a cheaper price. This leads to a rise in the standard of living of people of the world. Thus, free trade leads to higher production, higher consumption and higher all-round international prosperity.

**(iii) Competitive spirit prevails:**

Thirdly, free trade keeps the spirit of competition of the economy. As there exists the possibility of intense foreign competition under free trade, domestic producers do not want to lose their grounds. Competition enhances efficiency. Moreover, it tends to prevent domestic monopolies and free the consumers from exploitation.

**(iv) Accessibility of domestically unavailable goods and raw materials:**

Fourthly, free trade enables each country to get commodities which it cannot produce at all or can only produce inefficiently. Commodities and raw materials unavailable domestically can be procured through free movement even at a low price.

**(v) Greater international cooperation:**

Fifthly, free trade safeguards against discrimination. Under free trade, there is no scope for cornering raw materials or commodities by any country. Free trade can, thus, promote international peace and stability through economic and political cooperation.

**(vi) Free from interference:**

Finally, free trade is free from bureaucratic interferences. Bureaucracy and corruption are very much associated with unrestricted trade.

In brief, restricted trade prevents a nation from reaping the benefits of specialisation, forces it to adopt less efficient production techniques and forces consumers to pay higher prices for the products of protected industries.

**2. Arguments against Free Trade:**

Despite these virtues, several people justify trade restrictions.

**Following arguments are often cited against free trade:**

**(i) Advantageous not for LDCs:**

Firstly, free trade may be advantageous to advanced countries and not to backward economies. Free trade has brought enough misery to the poor, less developed countries, if past experience is any guide. India was a classic example of colonial dependence of UK's imperialistic power prior to 1947. Free trade principles have brought colonial imperialism in its wake.

**(ii) Destruction of home industries/products:**

Secondly, it may ruin domestic industries. Because of free trade, imported goods become available at a cheaper price. Thus, an unfair and cut-throat competition develops between domestic and foreign industries. In the process, domestic industries are wiped out. Indian handicrafts industries suffered tremendously during the British regime.

**(iii) Inefficient industries remain perpetually inefficient:**

Thirdly, free trade cannot bring all-round development of industries. Comparative cost principle states that a country specialises in the production of a few commodities. On the other hand, inefficient industries remain neglected. Thus, under free trade, an all-round development is ruled out.

**(iv) Danger of overdependence:**

Fourthly, free trade brings in the danger of dependence. A country may face economic depression if its international trading partner suffers from it. The Great Depression that sparked off in 1929-30 in the US economy swept all over the world and all countries suffered badly even if their economies were not caught in the grip of depression. Such overdependence following free trade becomes also catastrophic during war.

**(v) Penetration of harmful foreign commodities:**

Finally, a country may have to change its consumption habits. Because of free trade, even harmful commodities (like drugs, etc.) enter the domestic market. To prevent such, restrictions on trade are required to be imposed.

In view of all these arguments against free trade, governments of less developed countries in the post-Second World War period were encouraged to resort to some kind of trade restrictions to safeguard national interest.

**II. Protection:**

By protection we mean restricted trade. Foreign trade of a country may be free or restricted. Free trade eliminates tariff while protective trade imposes tariff or duty. When tariffs, duties

and quotas are imposed to restrict the inflow of imports then we have protected trade. This means that government intervenes in trading activities.

Thus, protection is the anti-thesis of free trade or unrestricted trade. Government imposes tariffs on ad valorem basis or imposes quota on the volume of goods to be imported. Sometimes, export taxes and subsidies are given to domestic goods to protect them from foreign competition. These are the various forms of protection used by modern governments to restrict trade.

Now an important question arises what forces the government to protect trade? What are the chief arguments for protection? Can protection deliver all the goods that a nation needs?

### **Arguments for Protection:**

The concept of protection is not a post-Second World War development. Its origin can be traced to the days of mercantilism (i.e., 16th century). Since then various arguments have been made in favour of protection.

The case for protection for the developing countries received a strong support from Argentine economist R. D. Prebisch and Hans Singer in the 1950s.

### **All these arguments can be summed up under three heads:**

- (i) Fallacious or dubious arguments;
- (ii) Economic arguments; and
- (iii) Non-economic arguments.

#### **(i) Fallacious Arguments:**

Fallacious arguments do not stand after scrutiny. These arguments are dubious in nature in the sense that both are true. 'To keep money at home' is one such fallacious argument. By restricting trade, a country need not spend money to buy imported articles. If every nation pursues this goal, ultimately global trade will squeeze.

#### **(ii) Economic Arguments:**

##### **(a) Infant industry argument:**

Perhaps the oldest as well as the cogent argument for protection is the infant industry argument. When the industry is first established its costs will be higher. It is too immature to reap economies of scale at its infancy. Workers are not only inexperienced but also less efficient. If this infant industry is allowed to grow independently, surely it will be unable to compete effectively with the already established industries of other countries.

Thus, an infant industry needs protection of a temporary nature and over time will experience some sort of 'learning effect'. Given time to develop an industry, it is quite likely that in the

near future it will be able to develop a comparative advantage, withstand foreign competition and survive without protection.

It is something like the dictum: Nurse the baby, protect the child, and free the adult. Once an embryonic industry gets matured it can withstand competition. Competition improves efficiency. Once efficiency is attained, protection may be withdrawn. Thus, an underdeveloped country attempting to have rapid industrialisation needs protection of certain industries.

However, in actual practice, the infant industry argument, even in LDCs, loses some strength. Some economists suggest production subsidy rather than protection of certain infant industries. Protection, once granted to an industry, continues for a long time. On the other hand, subsidy is a temporary measure since continuance of it in the next year requires approval of the legislature.

Above all, expenditure on subsidy is subject to financial audit. Thus, protection is something like a “gift”. Secondly, protection saps the self-sufficiency outlook of the protected industries. Once protection is granted, it becomes difficult to withdraw it even after attaining maturity. That means infant industries, even after maturity, get ‘old age pension’.

In other words, infant industries become too much dependent on tariffs and other countries. Thirdly, it is difficult to identify potential comparative advantage industries. A time period of 5 to 10 years may be required by an industry to achieve maturity or self-sufficiency. Under the circumstances, infant industry argument loses force.

In view of these criticisms, it is said by experts that the argument “boils down to a case for the removal of obstacles to the growth of the infants. It does not demonstrate that a tariff is the most efficient means of attaining the objective.”

These counter-arguments, however, do not deter us to support the growth of infant industries in less developed countries by means of tariff, rather than subsidies.

**(b) Diversification argument:**

As free trade increases specialisation, so protected trade brings in diversified industrial structure. By setting up newer and variety of industries through protective means, a country minimises the risk in production. Comparative advantage principle dictates narrow specialisation in production.

This sort of specialisation is not only undesirable from the viewpoint of economic development, but also a risky proposition. Efficiency in production in some products by some countries (e.g., coffee of Brazil, milk product of New Zealand, oil of Middle East countries) results in overdependence on these products.



If war breaks out, or if political relations between countries change, or if recessionary demand condition for the product grows up abroad, the economies of these industries will be greatly injured. Above all, this sort of unbalanced industrial growth goes against the spirit of national self-sufficiency. Protection is the answer to this problem. A government encourages diverse industries to develop through protective means.

However, a counter-argument runs. Politics, rather than economics, may be the criterion for the selection of industries to be protected in order to produce diversification at a reasonable cost. But, one must not ignore economics of protection.

**(c) Employment argument:**

Protection can raise the level of employment. Tariffs may reduce import and, in the process, import-competing industries flourish. In addition, import-substituting industries—the substitution of domestic production for imports of manufactures—develop. The strategy of import-substituting industrialisation promotes domestic industry at the expense of foreign industries.

Thus, employment potential under protective regime is quite favourable. In brief, tariff stimulates investment in import-competing and import substitution industries. Such investment produces favourable employment multiplier.

But cut in imports following import substituting industrialisation strategy may ultimately cause our exports to decline.

**(d) Balance of payments argument:**

A deficit in the balance of payments can be cured by curtailing imports. However, imports will decline following a rise in tariff rate provided other trading partners do not retaliate by imposing tariff on a country's export. However, import restrictions through tariff may be uncalled for if the balance of payments crisis becomes serious and chronic. In view of this and other associated problems of tariff, it is said that tariff is a second best policy.

**(e) Anti-dumping argument:**

Usually, we hear about unfair competition from firms of low-cost countries. One particular form of unfair competition is dumping which is outlawed by international trade pacts, such as WTO. Dumping is a form of price discrimination that occurs in trade. Dumping occurs when a country sells a product abroad at a low price because of competition and at a high price in the home market because of monopoly power.

In other words, dumping is a kind of subsidy given to export goods. This unfair practice can be prevented by imposing tariff. Otherwise, workers and firms competing with the dumped products will be hit hard.

**(f) Strategic trade advantage argument:**

It is argued that tariffs and other import restrictions create a strategic advantage in producing some new products having potential for generating some net profit. There are some large firms who prevent entry of new firms because of the economies of large scale production. Thus, these large firms reap pure profits over the long run during which new firms may not dare enough to compete with these established large firms. Thus, the large scale economies themselves prevent entry of new firms.

But as far as new products are concerned, a new firm may develop and market these products and reap substantial profit. Ultimately, successful new firms producing new products become one of the few established firms in the industry. New firms showing potential for the future must be protected. "If protection in the domestic market can increase the chance that one of the protected domestic firms will become one of the established firms in the international market, the protection may pay off."

**(iii) Non-Economic Arguments:**

**(a) National defense argument:**

There are some industries which may be inefficient by birth or high cost due to many reasons and must be protected. This logic may apply to the production of national defence goods or necessary food items. Whatever the cost may be, there is no question of compromise for the defence industry since 'defence is more important than opulence'. Dependence on foreign countries regarding supply of basic food items as well as defence products is absolutely unwise.

However, objections against this argument may be cited here. It is difficult to identify a particular item as a defence industry item because we have seen that many industries— from garlic to clothespin—applied for protection on defence grounds. Candlestick-maker (for emergency lighting) and toothpick-maker (to have good dental hygiene for the troops) demanded protection at different times at different places. A nation which builds up its military strength through tariff protection does not sound convincing. Thus, tariff is a second-best solution.

**(b) Miscellaneous arguments against protection:**

There are some good 'side effects' or 'spillover effects' of protection. This means that it produces some undesirable effects on the economy and the basic objective of protection can be attained rather in a costless manner by other direct means other than protection. That is, protection is never more than a second-best solution.

Firstly, protection distorts the comparative advantage in production. This means that specialisation in production may be lost if a country imposes tariff. All these lead to squeezing of trade. Secondly, it imposes a cost on the society since consumers buy goods at a high price. Thirdly, often weak declining industries having no potential future stay on the economy under the protective umbrella. Fourthly, international tension often escalates, particularly when tariff war begins.

Usually, a foreign country retaliates by imposing tariff on its imports from the tariff-imposing country. Once the retaliatory attitude (i.e., 'beggar-my-neighbour policy') develops, benefits from protection will be lost. Finally, protection encourages bureaucracy. Increase in trade restrictions means expansion of governmental activity and, hence, rise in administrative cost. Bureaucracy ultimately leads to corruption.

### **III. Conclusion:**

The classical golden age of free trade no longer exists in the world. But, free trade concept has not been abandoned since the case for free trade is strongest in the long run. Protection is a short term measure. Thus, the issue for public policy is the best reconciliation of these two perspectives so that gains from trade (may be free or restricted) become the greatest.

In recent times (July 2008), most of the countries (153) are members of the World Trade Organisation (WTO) which favour more free trade than restricted trade. This philosophy gathered momentum in the Dunkel Draft and General Agreement on Tariffs and Trade (GATT) negotiations. The aims of both the GATT (abolished in 1995) and now the WTO are trade liberalisation rather than trade restrictions.

### **Foreign Exchanges**

Foreign exchange, or Forex, is the conversion of one country's currency into that of another. In a free economy, a country's currency is valued according to factors of supply and demand. In other words, a currency's value can be pegged to another country's currency, such as the U.S. dollar, or even to a basket of currencies. A country's currency value also may be fixed by the country's government. However, most countries float their currencies freely against those of other countries, which keeps them in constant fluctuation.

The value of any particular currency is determined by market forces based on trade, investment, tourism, and geo-political risk. Every time a tourist visits a country, for example, he or she must pay for goods and services using the currency of the host country. Therefore, a tourist must exchange the currency of his or her home country for the local currency. Currency exchange of this kind is one of the demand factors for a particular currency. Another important factor of demand occurs when a foreign company seeks to do business

with a company in a specific country. Usually, the foreign company will have to pay the local company in their local currency. At other times, it may be desirable for an investor from one country to invest in another, and that investment would have to be made in the local currency as well. All of these requirements produce a need for foreign exchange and are the reasons why foreign exchange markets are so large.

Foreign exchange is handled globally between banks and all transactions fall under the auspice of the Bank of International Settlements.

### **Purchasing power parity theory**

#### **Introduction:**

No country today is rich enough to have a free gold standard, not even the U.S.A.

All countries have now paper currencies and these paper currencies of the various countries are not convertible into gold or other valuable things. Therefore, these days various countries have paper currency standards. The exchange situation is difficult in such cases. In such circumstances the ratio of exchange between the two currencies is determined by their respective purchasing powers.

The purchasing power parity theory was propounded by Professor Gustav Cassel of Sweden. According to this theory, rate of exchange between two countries depends upon the relative purchasing power of their respective currencies. Such will be the rate which equates the two purchasing powers. For example, if a certain assortment of goods can be had for £1 in Britain and a similar assortment with Rs. 80 in India, then it is clear that the purchasing power of £ 1 in Britain is equal to the purchasing power of Rs. 80 in India. Thus, the rate of exchange, according to purchasing power parity theory, will be  $£1 = \text{Rs. } 80$ .

Let us take another example. Suppose in the USA one \$ purchases a given collection of commodities. In India, same collection of goods cost 60 rupees. Then rate of exchange will tend to be  $\$ 1 = 60$  rupees. Now, suppose the price levels in the two countries remain the same but somehow exchange rate moves to  $\$1=61$  rupees.

This means that one US\$ can purchase commodities worth more than 46 rupees. It will pay people to convert dollars into rupees at this rate, ( $\$1 = \text{Rs. } 61$ ), purchase the given collection of commodities in India for 60 rupees and sell them in U.S.A. for one dollar again, making a profit of 1 rupee per dollar worth of transactions.

This will create a large demand for rupees in the USA while supply thereof will be less because very few people would export commodities from USA to India. The value of the rupee in terms of the dollar will move up until it will reach  $\$1 = 60$  rupees. At that point,

imports from India will not give abnormal profits.  $\$ 1 = 60$  rupees and is called the purchasing power parity between the two countries.

Thus while the value of the unit of one currency in terms of another currency is determined at any particular time by the market conditions of demand and supply, in the long run the exchange rate is determined by the relative values of the two currencies as indicated by their respective purchasing powers over goods and services.

In other words, the rate of exchange tends to rest at the point which expresses equality between the respective purchasing powers of the two currencies. This point is called the purchasing power parity. Thus, under a system of autonomous paper standards the external value of a currency is said to depend ultimately on the domestic purchasing power of that currency relative to that of another currency. In other words, exchange rates, under such a system, tend to be determined by the relative purchasing power parities of different currencies in different countries.

In the above example, if prices in India get doubled, prices in the USA remaining the same, the value of the rupee will be exactly halved. The new parity will be  $\$ 1 = 120$  rupees. This is because now 120 rupees will buy the same collection of commodities in India which 60 rupees did before. We suppose that prices in the USA remain as before. But if prices in both countries get doubled, there will be no change in the parity.

In actual practice, however, the parity will be modified by the cost of transporting goods (including duties etc.) from one country to another.

### **A Critique of Purchasing Power Parity Theory:**

**The purchasing power parity theory has been subject to the following criticisms:**

The actual rates of exchange between the two countries very seldom reflect the relative purchasing powers of the two currencies. This may be due to the fact that governments have either controlled prices or controlled exchange rates or imposed restrictions on import and export of goods.

Moreover, the theory is true if we consider the purchasing power of the respective currencies in terms of goods which enter into international trade and not the purchasing power of goods in general. But we know that all articles produced in a country do not figure in international trade.

Therefore, the rate of exchange cannot reflect the purchasing power of goods in general. For example, in India we may be able to get a dozen shirts washed with Rs. 40, but only 2 shirts with one dollar in the USA. Obviously, the purchasing power of one dollar in the USA is much less than the purchasing power of Rs. 40 in India.

This is due to the fact that dhobis do not form an article of international trade. If dhobis entered into international trade and freely moved into the U.S.A., then in terms of clothes washed, the purchasing power of Rs. 40 may be equalized with the purchasing power of a dollar. Further, it is very difficult to measure purchasing power of a currency. It is usually done with the help of index numbers. But we know that the index numbers are not infallible.

**Among the difficulties connected with index numbers are the following important ones:**

- (i) Different types of goods that enter into the calculation of index numbers;
- (ii) Many goods which may enter into domestic trade may not figure in international trade;
- (iii) Internationally traded goods also may not have the same prices in all the markets because of differences in transport costs.

Besides, the theory of purchasing power applies to a stationary world. Actually the world is not static but dynamic. Conditions relating to money and prices, tariffs, etc., constantly go on changing and prevent us from arriving at any stable conclusion about the rates of exchange.

The internal prices and the cost of production are constantly changing. Therefore, a new equilibrium between the two currencies is almost daily called for. As Cassel observes, "differences in two countries' economic situation, particularly in regard to transport and customs, may cause the normal exchange rate to deviate to a certain extent from the quotient of the currencies intrinsic purchasing powers." If a country raises its tariffs, the exchange value of its currency will rise but its price level will remain the same.

Besides, many items of balance of payments like insurance and banking transactions and capital movements are very little affected by changes in general price levels. But these items do influence exchange rates by acting upon the supply of and the demand for foreign currencies.

The Purchasing Power Parity Theory ignores these influences altogether. Further, the theory, as propounded by Cassel, says that changes in price level bring about changes in exchange rates but changes in exchange rates do not cause any change in prices. This latter part is not true, for exchange movements do exercise some influence on internal prices.

The purchasing power parity theory compares the general price levels in two countries without making any provision for distinction being drawn between the price level of domestic goods and that of the internationally traded goods. The prices of internationally-traded goods will tend to be the same in all countries (transport costs are, of course omitted). Domestic prices on the other hand, will be different in the two countries, even between two areas of the same country.

The purchasing power parity theory assumes that there is a direct link between the purchasing power of currencies and the rate of exchange. But in fact there is no direct relation between the two. Exchange rate can be influenced by many other considerations such as tariffs, speculation and capital movements.

### **Keynes' Critique:**

**According to Keynes, there are two basic defects in the purchasing power parity theory, namely:**

- (i) It does not take into consideration the elasticity's of reciprocal demand, and
- (ii) It ignores the influences of capital movements.

In Keynes's view, foreign exchange rates are determined not only by the price movements but also by capital movements, the elasticity's of reciprocal demand and many other forces affecting the demand for and supply of foreign exchange.

“By elasticity of reciprocal demand is meant the responsiveness of one country's demand for another country's exports with respect to price or income.” As for price elasticity, generally speaking, greater the proportion of luxuries and semi-luxuries in the exports demanded, the more elastic will be the country's demand for another country's exports.

It will also be more elastic, when there is a greater number of alternative markets in which to buy and greater the capacity to produce the effective substitutes for goods imported. As for the income elasticity of demand for imports, changes in demand for goods and services and in the derived demand for foreign exchange is functionally related to the changes in national income.

How far is a country's demand for another's exports responsive to a change in national income, will influence the rate of exchange. In other words, it is the character of the propensity to import out of a given income that is supposed to affect the exchange rate independently of international price movements.

Technological improvement adding to the productivity of the country and making its goods cheaper and better, tariff changes and exports subsidies affect exchange rates via their influence upon reciprocal demand quite independently of international price movements.

Capital movements, both short-term and long-term, are the other important influences. There is hot money flying from a country so as to make profits or avoid losses on exchange rate fluctuations and there is a 'refugee capital' seeking safety and security abroad.

An actual or expected change in the domestic price of a foreign currency may lead to inflow or outflow of 'hot money' causing a further change in the exchange rate without there being price changes in either country. The inflows tend to raise the exchange value of the currency

of the capital receiving country and outflows will lower it. Long-term movements of capital also has a similar effect.

In view of the defects pointed out above the purchasing power parity theory does not offer an adequate or satisfactory explanation of fluctuations in the rates of exchange. The determination of the exchange rate depends not only on international price relations but also on many other factors. This leads to a more adequate explanation of the determination of foreign exchange rates through demand for and supply of foreign exchange viz. balance of payments theory.



## UNIT V

### PUBLIC FINANCE

#### **Structure and Growth of Public Expenditure**

There has been a phenomenal increase in public expenditure in almost all the countries of the globe. This tendency which was noted in the previous century has become crystallised in the present century.

The classical economists assumed the state has very limited functions under the laissez faire policy. The functions of the state were restricted to justice, police and arms. According to J.B. Say “the very best of all plans of finance is to spend a little”. But today the role of the state has changed under the welfare criterion and there is a persistent trend towards an extensive and intensive increase in the scale of governmental performance.

#### **I. Welfare State Ideology**

The modern State is a welfare state. It aims at promoting the economic, political, and social well-being of its citizens. It makes every effort to improve the living standard of the common people. For this purpose, it has to undertake many functions and services never visualised before.

Even in an avowedly capitalistic economy, there has been increasing State intervention through legislative and administrative measures for augmenting production and improving distribution. Many wants which were formerly satisfied individually by private means are now satisfied collectively through public expenditure.

In the classical era, the State was assumed to have a very limited function under the laissez faire policy. The functions of the State were restricted to justice, police, and army.

Today, however, the role of the State has changed under the welfare criterion and there is a persistent trend towards an extensive and intensive increase in the scale of governmental performance. Apart from performing old functions more efficiently and on a larger scale, a modern State constantly undertakes new functions and added responsibilities day by day.

It now embraces many new ideas such as social insurance, unemployment relief, and provisions for underprivileged classes. In order to reduce inequalities of income, the State has to spend a large sum on free and cheap medical aid, subsidised food and housing, free education. Especially in underdeveloped countries such as India, the State expenditure on these social services is rising fast.

In India, for instance, expenditure on social service is rising fast. In India, for instance, expenditure on social services has gone up from `419 crores in the First Plan to `2,772 crores in the Fourth Plan. In the Seventh Plan, it was envisaged to be `29,350 crores. In each five year plan, India has been providing a significant portion of the total plan outlay for the health sector in order to provide quality health care to all needy people. The percentage of plan allocation to health sector increased from 3.4 in the first plan to 6.5 per cent in the eleventh plan. In the same pattern, the per capita expenditure also increased from `0.61 in the first plan to `214.62 in the eleventh plan. In the 12<sup>th</sup> five year plan, the government has decided to boost public spending in the sector to 2.5 per cent of GDP from 1.27 per cent in the 9<sup>th</sup> five year plan. The central government outlay for the health sector in the twelfth plan has been increased by about 335 per cent to `300018 crore over the actual outlay of `99491crore in the 11<sup>th</sup> plan. Due to the pressure of social progress under the welfare state theory, in addition to the maintenance of law and order, government participation in the economic field for the provision of some goods, such as communication, education, medical facilities, etc. was necessitated. In short, the Wagner hypothesis states that in a welfare state, as the economy expands, public expenditure will also tend to increase persistently.

## **2. The Need for Defence**

International political situation is insecure and uncertain. Due to the invention of nuclear weapons, there is always the danger of foreign aggression. Modern States are already facing a cold war. As such, every nation has to prepare itself for strong defence. The defence expenditure is thus continuously rising. It contains expenditure on war materials, maintenance and growth of armed forces, naval and air wings, expenses on the development of military art and practice, pensions to retired war personnel, interests on war debt, cost of rehabilitation, etc.

## **3. The Influence of Democratic Forces**

The democratic structure of government is more expensive than totalitarian government. In India democracy is becoming a very costly affair. The Expenditure on elections and bye-elections is increasing. The recent growth of democracy and socialism everywhere in the world has caused public expenditure to increase very much.

The number of ministries and executive offices has also been increasing. Further, the ruling party has to fulfil its promises and launch upon new policies and programmes to achieve

socialist objectives, in order to create a favourable image in the public. This also requires increasing State expenses in order to provide new amenities and opportunities to the people at large.

#### **4. The Urbanisation Effect**

The spread of urbanisation is an important factor leading to the relative growth of public expenditure in modern times. With the growth of urban areas, there has been an increasing tendency of expenditure on civil administration.

Expenses on water supply, electricity, provision of transport, maintenance of roads, schools and colleges, traffic controls, public health, parks and libraries, playgrounds, etc. have increased enormously these days. Likewise, the expenditure on courts, prisons etc. is increasing, especially in the urban sector.

#### **5. The Rural Development Effect**

In an underdeveloped country, the government has also to spend more and more for rural development. It has to undertake schemes like community development projects and other social measures.

#### **6. The Population Effect**

A high growth of population naturally calls for increase in the expenses as all State functions are to be performed more extensively. Rising population also poses various problems in poor countries.

The State will have the added responsibility of solving such problems as food, unemployment, housing and sanitation. Further, overpopulated countries like India will have to check the population growth. The State has, therefore, to spend more and more on family planning campaigns every year.

#### **7. The Growth of Transport and Communication**

With the expansion of trade and commerce, the State has to provide and maintain a quick and efficient transport system. Transport being a public utility, the State has to provide it cheaply also. Hence, railway and passenger transport is nationalised.

Government has, therefore, to run transport services even at a loss. This obviously calls for a high expenditure for maintenance and expansion. Further, the government in a poor country has to spend a lot on constructing new railway lines, new roads, national highways, bridges and even canals to connect the different areas with a smooth transport system as a precondition of growth.

## **8. The Planning Effect**

The government through the planning commission formulates and implements plans to provide full employment, reduce inequalities of income and wealth distribution, bring about a balanced regional development and to achieve a number of other socio-economic objectives. The government has to spend huge sums on planning leading to an increase in public expenditure. In a less developed economy, the government adopts economic planning for the development of the country. In a planned economy, thus, when the public sector is expanding its role, public expenditure obviously shows an increasing trend.

In India, for instance, the public sector outlay during the First Five Year Plan was just Rs. 1,960 crores, which is now estimated at Rs. 2, 47,865 crores during the Eighth Plan period (1992-97).

## **9. Inflation**

With the rising prices, the government has to keep on increasing public expenditure to carry out its functions and maintain the supply of public goods intact. During inflation, the government has to pay additional DA to its employees which obviously call for an extra burden on public expenditure.

## **10. Industrial Development**

Industrial production contributes to increase in national income and it improves the standard of living. It is evident from the Five Year Plans, which gives top priority in the second five year plan. After that, industrial sector, in India, blooms everywhere and in turn backward regions of our country also gets benefited. Obviously all these developments are resulted by way increasing in public expenditure.

## **11. Education**

In any country, social and political development can never take place unless the citizens are educated. In order to carry the benefits to weaker sections of society, the government offers them free scholarships and even maintenance grants which enable them to buy books. Hence, a substantial increase in public expenditure is needed of the hour.

## **12. Servicing of Large Public Debt**

Modern governments require huge finance for its various development activities. It cannot raise funds by taxation alone. Therefore it must resort to internal and external borrowing. Hence it has to pay interest and repay capital. This leads to an increase in public expenditure.

## **Public Revenue**

The income of the government through all sources is known as public revenue. Public income has been defined by Dalton in a narrow sense and in a broad sense. In the narrow sense, it includes income from taxes, prices of goods and services supplied by public enterprises, revenue from administrative activities, such as fees, fines etc. It is referred to as public revenue. In its wider sense it includes all the incomes of the government during a given period of time, including public borrowings from individuals and banks and income from public enterprises. It is known as public receipts.

There are two sources of public revenue viz., tax revenue and non-tax revenue.

The revenue obtained through various taxes is known as tax revenue, while income received from administration, commercial enterprises, gifts and grants is non-tax revenue.

## **Importance of Public Revenue**

As a matter of fact the whole economy is influenced by the public revenue. Thus we can say that the aims of public revenue are:

- i. To raise funds
- ii. To bring about equitable distribution of wealth
- iii. To encourage savings and investments
- iv. To direct consumption pattern
- v. To encourage or control production

In short public revenue can be used as an investment of controlling nations economic activities.

## **Capital and Revenue Receipts**

When the business receives money it is again of two sorts. It may be a long-term receipt, a contribution by the owner, either to start the business off or to increase the funds available to it. It might be a mortgage or which brings money into the business for a long-term, but in this case it is not the owner of the business but some other investor who is supplying the money.

On the other hand, the receipt may be a short-term receipt, one which is truly a profit of the business. It may be rent received, commission received or cash for sale of goods made that day, or at some previous time.

### **Capital Receipt**

Receipts which are non-recurring (not received again and again) by nature and whose benefit is enjoyed over a long period are called "Capital Receipts", e.g. money brought into the business by the owner (capital invested), loan from bank, sale proceeds of fixed assets etc. Capital receipt is shown on the liabilities side of the Balance Sheet.

## Revenue Receipt

Receipts which are recurring (received again and again) by nature and which are available for meeting all day to day expenses (revenue expenditure) of a business concern are known as "Revenue receipts", e.g. sale proceeds of goods, interest received, commission received, rent received, dividend received etc.

### Distinction between Capital Receipt and Revenue Receipt

Revenue Receipt	Capital Receipt
It has short-term effect. The benefit is enjoyed within one accounting period.	It has long-term effect. The benefit is enjoyed for many years in future.
It occurs repeatedly. It is recurring and regular.	It does not occur again and again. It is nonrecurring and irregular.
It is shown in profit and loss account on the credit side.	It is shown in the Balance Sheet on the liability side.
It does not produce capital receipt.	Capital receipt, when invested, produces revenue receipt e.g. when capital is invested by the owner, business gets revenue receipt (i.e. sale proceeds of goods etc.).
This does not increase or decrease the value of asset or liability.	The capital receipt decreases the value of asset or increases the value of liability e.g. sale of a fixed asset, loan from bank etc.
Sometimes, expenses of capital nature are to be incurred for revenue receipt, e.g. purchase of shares of a company is capital expenditure but dividend received on shares is a revenue receipt.	Sometimes expenses of revenue nature are to be incurred for such receipt e.g. on obtaining loan (a capital receipt) interest is paid until its repayment.

## Tax Revenue

Taxes are imposed by the government on the people and it is compulsory on the part of the citizens to pay taxes, without expecting a return. Prof. Seligman defines a tax as "a compulsory contribution from a person to the government to defray the expenses incurred in the common interest of all without reference to special benefits conferred". Prof. Taussig puts

it as” the essence of a tax, as distinguished from other charges by government, is the absence of a direct *quid pro quo* between the tax payer and the public authority”.

### **Characteristics of a Tax**

A tax possesses the following characteristics:

1. A tax is a compulsory payment levied by the state. Refusal to pay a tax leads to punishment.
2. There is no direct *quid pro quo* between the state and the people. The taxpayers cannot claim reciprocal benefits against the taxes paid.
3. A tax is a payment for meeting the expenses in the common interest of all the citizens. The state exists for the common good for all.
4. A tax is payable regularly and periodically. It is a personal obligation imposed on the tax payer. He has to pay it. He should not try to evade it.

### **Non-tax Revenue**

Non-tax revenue refers to the income received by the government through administration, commercial enterprises, grants and gifts.

### **Administrative Revenue**

The administrative revenues arise from the administrative functions of the government. They include fees, licence fee, special assessment, fines, forfeitures and escheat.

**Fees** – Fees are charged by the government to meet the cost of administrative services rendered. For ex. Court fee

**Licence Fee** – A licence fee is similar to a fee. Licence fees are charged to give permission for something by the controlling authority. The objective of a licence fee is to control injurious activities.

**Special Assessment** – A special assessment is in the words of Seligman, a compulsory contribution, levied in proportion to the special benefits derived, to defray the cost of a specific improvement to property undertaken in the public interest”.

**Fines and Penalties** – Fines and penalties are imposed on persons as a punishment for infringement of laws. They are not imposed for the purpose of obtaining revenue but to prevent crime.

**Forfeitures** – Forfeitures refer to the penalties imposed by courts for the failure of individuals to appear in the courts, to complete contracts as stipulated etc.

**Escheat** – the state may take possession of the property of a person who dies without having any legal heirs or without having made any specific wills.

**Gifts and Grants** – Patriotic, charitably-minded, public spirited or conscientious persons may give gifts to the state. The volume of gifts is not very large except in times of war or other emergency. Gifts are generally voluntary contributions.

### **Revenue from Commercial enterprises**

Commercial revenues refer to the income earned by public enterprises by selling their goods and services. For example, payment for postage, tolls, interest on borrowed funds etc. Government may undertake many enterprises due to various reasons: private individuals are unwilling to take up certain essential services because of low profits or long gestation period; certain goods may be produced by the government to regulate their consumption; some enterprises may undertaken to protect the interest of the consumers.

### **Sources of Tax Revenue for the Central and States**

The income of government through all its sources is called public revenue. A tax is defined as a compulsory payment to the government authority without any direct benefit.

#### **I - Central Revenue**

There are two sources of revenue to the union government of India. Tax revenue of the union government consists of

1. Tax on income and expenditure
2. Tax on property and capital transactions
3. Tax on commodities and services

#### **Tax on income and expenditure**

Under these head there are three taxes

- i. Personal Income Tax – under the provisions of the CI Act, income tax is levied on all personal income other than agricultural income. It is the duty of the tax-payer to pay the tax if he is liable to pay it and should in no case think to evade it.
- ii. Expenditure Tax – it is a tax on expenditure, it is levied when the income is spend. Prof. Kaldor recommended this tax in India and it was levied on 1<sup>st</sup> April of 1958.
- iii. Corporation Taxes – the corporation tax is imposed on the profits of corporation both Indian and foreign. In entire proceeds of corporation tax is retained by the union government and no share is given to the states.

#### **Tax on property and capital transactions**

Under this head we have estate duty, wealth tax and gift tax.

- i. Estate Duty - Estate Duty is the tax payable by legal heirs on the estate of a deceased person herited by them. It was introduced on October 1953. Recently it was abolished.



- ii. Wealth tax – This tax was introduced in 1957 on the recommendation of Prof. Kaldor. This tax is levied on the value of the total property exceeding Rs 2.5 lakhs.
- iii. Gift Tax- the gift tax was introduced in April 1958 on the recommendation of Prof. Kaldor. Gifts are voluntary contribution from private individuals or non-government donors to the government fund for specific purpose, such as, relief fund or defence fund during a war or an emergency.

#### Tax on commodities and services

Under this category, we have excise duty and customs duty.

- i. Union Excise duty – Excise duty levied on all commodity is produced anywhere in India except alcoholic, liquor and opium narcotics, drugs (on these goods the state can impose excise duty).
- ii. Customs duty – customs duty is imposed on goods exported from India and on goods imported in India. Import duty is used to protect the domestic industry.

## II - State Revenue

The constitution of India has provided a federal structure for India – the central and state governments. The central government has a separate source of revenue and the state government has different source of revenue.

- i. Sale tax – All the state imposed tax on goods and services sold inside the states. The revenue from these tax fully retained by the state governments.
- ii. Land revenue – the state government gets revenue from the tax imposed on lands.
- iii. Taxes on Agriculture Income – the state government can also imposed tax on agriculture income but majority of the states do not resort to this kind of tax due to political compulsion.
- iv. Taxes on lands and buildings – the state government gets revenue from the taxes on land and buildings.
- v. Taxes on mineral rights - the state government gets revenue for the rights it awards for the exploitation of minerals.
- vi. Excise duty on alcoholic, liquors and narcotics - the state government imposed tax on liquor and narcotics and gets a size of revenue.
- vii. Entertainment tax - the state government gets revenue by imposing entertainment tax. This tax is imposed on cinema and other entertainment items.
- viii. Tolls - the state government gets revenue by way of tolls.
- ix. Stamp duty – the state government revenue from the stamp duty when we purchase a property we have to pay stamp duty to the state government.

## **Sources of Non-Tax Revenue for the Central and States**

Non-tax revenue for Central

1. Interest receipts
2. Dividends and Profits
3. Revenue from fiscal services and
4. Revenue from general services
5. Cash and grants from other countries

Non-tax revenue for State

1. Fees, Licences and Permits
2. Fines and Penalties
3. Forfeitures
4. Escheat
5. Special Assessment
6. Revenue from ponds, trees and lakhs

## **Sources of Revenue for Local Bodies**

Local bodies and local self government refers to gram-panchayat, municipalities and co-operatives. These local governments receive their revenue from tax as well as non-tax sources. The various sources of funds for local bodies can be classified as follows.

1. Revenue from taxes imposed and collected by local bodies.
2. The share assigned to local bodies by the state government.
3. Grants-in-aid
4. Revenue from non-tax sources such as fines, tolls and fees.

The main taxes levied by the municipalities in different states are as follows,

- a. Taxes on property; rates on buildings and lands including open land,
- b. Taxes on goods; octroi and terminal taxes
- c. Personal taxes; taxes on professions, trades, callings and employments
- d. Taxes on vehicles and animals
- e. Theatre or show tax

## **Important principles of Taxation**

### **1. Neutrality:**

Tax system should be designed to be neutral, i.e., it should disturb the market forces as little as possible, unless there is a good reason to the contrary.

As a general rule, people do not like tax payment. In fact, every tax provides an incentive to do something to avoid it. Since the government is under compulsion to collect taxes, it is not

possible to guarantee complete neutrality. The tax system must, therefore, seek to achieve neutrality, by minimising the disturbance to the market that comes from taxation.

## **2. Non-neutrality:**

Sometimes it becomes essential to maintain non-neutrality for meeting certain social objectives. These objectives can be secured by providing tax incentives. This means that in some cases, it may be desirable to disturb the private market.

For example, the government may impose tax on polluting activities, so as to discourage firms to pollute the environment. Likewise, a tax on cigarettes will serve a two-fold purpose: raising revenue and discouraging consumption of this harmful item. In both the cases, the market is disturbed but in a desirable way.

## **3. Equity:**

Taxation involves compulsion. Therefore, it is important for the tax system to be fair. On grounds of equity it has been suggested that a tax system should be based on a principle of equal sacrifice or ability to pay. The latter is determined by (a) income or wealth and (b) personal circumstances.

Richard Musgrave has argued that taxes are to be judged on two main criteria: equity (Is the tax fair?) and efficiency (Does the tax interfere unduly with the workings of the market economy?) It comes to us a surprise that economists have been mostly concerned with the latter, while public discussions about tax proposals always focus on the former.

We may, therefore, start with the concept of equitable taxation:

### **(a) Horizontal Equity:**

There are three distinct concepts of tax equity. The first is horizontal equity. Horizontal equity is the notion that equally situated individuals should be taxed equally. More specifically, persons of equal income should pay identical amounts in taxes. There is hardly any controversy about this principle. But it is very difficult to apply the concept in practice.

Let us consider, for example, the personal income tax. Horizontal equity calls for two families in the same income to pay the same tax. But what if one family has eight children and the other has none? Or, what if one family has unusually high medical expense, while the other has none (even if two families have the same number of members)?

### **(b) Vertical Equity:**

The second concept of fair taxation follows logically from the first. If equals are to be treated equally, it logically follows that un-equals should be treated unequally. This precept is known as vertical equity. This concept has been translated into the ability to pay principle, according to which those most able to pay should pay the maximum amount of taxes. Broadly, the

principle suggests that the fairest tax is one based on one's financial ability to support governmental activities through tax payments.

The ethical base of this principle rests on the assumption that one rupee paid in taxes by a rich person represents less sacrifice than does the same rupee tax paid by a poor man and that fairness demands equal sacrifice by both rich and poor in support of government. Thus, a rich man must pay more money in taxes than would a poor man for each to bear the same burden in supporting services provided by the government.

Thus, horizontal equity suggests that people who are equal should pay equal taxes: vertical equity suggest that, un-equals should be treated unequally. Specifically, the rich should pay more taxes than the poor, since wealth is considered an appropriate measure of one's ability to pay taxes.

### **Characteristics of a Good Tax System**

An ideal tax system should satisfy all the canons of taxation. It should procure sufficient revenue. It should not affect production. A good tax system is expected to satisfy the following conditions.

1. Taxes should satisfy the canon of equity. That is rich people should pay more.
2. Productivity in the tax measures
3. Adaptability to the changing requirements of the economy
4. No adverse effects on capital formation
5. It should not destroy the incentive to earn, save and invest in productive enterprises.
6. Taxes should procure sufficient amount of revenue to the government to facilitate the achievement of full employment and economic growth.
7. Cost of collecting the taxes should be minimum. Taxes should give least trouble to tax payers.
8. Tax system should provide maximum social advantage
9. The tax system should be understandable to the tax-payer
10. Allocation of taxes among different groups of people should be according to the principles of least sacrifice, cost and benefit and ability to pay.
11. Tax system has the confidence of the people.
12. Essential commodities should free from taxation
13. Tax system should have the best combination of direct and indirect taxes.

### **Objectives of Taxation**

The main objective of taxation is to obtain revenue to the government. In addition to this, taxation can be used for reducing inequalities in income distribution, for controlling the

fluctuations in income and employment, for securing equilibrium in balance of payments and for achieving several other economic objectives.

1. Finance or revenue aspect

The classical economists believed that the main objective of taxation is that of raising revenue. Of course, non-revenue considerations also play an important role in tax policy. However, when the government needs revenue to meet increased expenditure, it relies on taxation.

2. Regulatory aspect

Now-a-days, taxation is used for regulating the economic life of the community. For example, excise duties are levied on liquor for controlling consumption.

3. Regulation of economic activity

Taxation is used to regulate national income. Taxes transfer income from individuals to government. This affects consumption and investment and hence the level of national income. Sometimes, taxes are included in the price of the commodities. This discourages the consumption of non-essential commodities.

4. Reduction in inequalities of wealth

Rapid economic development has resulted in glaring inequalities in the distribution of income and wealth. The main aim of the government is to secure social justice by reducing inequalities. Income tax, excess profits tax, inheritance tax, wealth tax etc can reduce inequalities in income and wealth.

5. Functional Finance

A.P Lerner and his followers insist that public finance should be functional finance. Functional finance implies that maintenance of adequate level of national income should be the main aim of public finance.

6. Incentive Taxation

Incentive taxation plays an important role in developing countries. In the words of Benjamin Higgins, 'The Purpose of incentive taxation is to stimulate an increase in the flow of labour or managerial effort or of savings and investment or to improve the allocation of capital, land, labour and entrepreneurs'.

7. Avoidance of cyclical fluctuations

Yet another objective of taxation is to avoid cyclical fluctuations.. in other words, counter-cyclical policy of raising the rates of taxes during boom and reducing it in times of depression should be followed.

8. Allocation of Resources

Taxation aims at allocation of resources in desirable channels of investment. The available resources should be used for promoting export industries and heavy taxes should be imposed on undesirable industries.

### **Effects of Taxation**

Taxation as essential ingredient of fiscal policy has an important influence on the general level of economic activity. Dalton rightly pointed out 'the best system of taxation from economic point of view is that which has the best or the least bad economic effects'. As pointed out by economic effects of taxation can be studied under the following heads:

1. Effects of Taxation on Production
2. Effects of Taxation on income distribution
3. Other Effects of Taxation

The most important objective of taxation is to raise required revenues to meet expenditures. Apart from raising revenue, taxes are considered as instruments of control and regulation with the aim of influencing the pattern of consumption, production and distribution. Taxes thus affect an economy in various ways, although the effects of taxes may not necessarily be good. There are some bad effects of taxes too.

**Economic effects of taxation can be studied under the following headings:**

#### **1. Effects of Taxation on Production:**

**Taxation can influence production and growth. Such effects on production are analysed under three heads:**

- (i) effects on the ability to work, save and invest
- (ii) effects on the will to work, save and invest
- (iii) effects on the allocation of resources.

#### **2. Effects on the Ability to Work Save:**

Imposition of taxes results in the reduction of disposable income of the taxpayers. This will reduce their expenditure on necessities which are required to be consumed for the sake of improving efficiency. As efficiency suffers ability to work declines. This ultimately adversely affects savings and investment. However, this happens in the case of poor persons.

Taxation on rich persons has the least effect on the efficiency and ability to work. Not all taxes, however, have adverse effects on the ability to work. There are some harmful goods, such as cigarettes, whose consumption has to be reduced to increase ability to work. That is why high rate of taxes are often imposed on such harmful goods to curb their consumption.

But all taxes adversely affect ability to save. Since rich people save more than the poor, progressive rate of taxation reduces savings potentiality. This means low level of investment. Lower rate of investment has a dampening effect on economic growth of a country.

Thus, on the whole, taxes have the disincentive effect on the ability to work, save and invest.

### **3. Effects on the will to Work, Save and Invest:**

The effects of taxation on the willingness to work, save and invest are partly the result of money burden of tax and partly the result of psychological burden of tax.

Taxes which are temporarily imposed to meet any emergency (e.g., Kargil Tax imposed for a year or so) or taxes imposed on windfall gain (e.g., lottery income) do not produce adverse effects on the desire to work, save and invest. But if taxes are expected to continue in future, it will reduce the willingness to work and save of the taxpayers.

Taxpayers have a feeling that every tax is a burden. This psychological state of mind of the taxpayers has a disincentive effect on the willingness to work. They feel that it is not worth taking extra responsibility or putting in more hours because so much of their extra income would be taken away by the government in the form of taxes.

However, if taxpayers are desirous of maintaining their existing standard of living in the midst of payment of large taxes, they might put in extra efforts to make up for the income lost in tax.

It is suggested that effects of taxes upon the willingness to work, save and invest depends on the income elasticity of demand. Income elasticity of demand varies from individual to individual.

If the income demand of an individual taxpayer is inelastic, a cut in income consequent upon the imposition of taxes will induce him to work more and to save more so that the lost income is at least partially recovered. On the other hand, the desire to work and save of those people whose demand for income is elastic will be affected adversely.

Thus, we have conflicting views on the incentives to work. It would seem logical that there must be a disincentive effect of taxes at some point but it is not clear at what level of taxation that crucial point would be reached.

### **4. Effects on the Allocation of Resources:**

By diverting resources to the desired directions, taxation can influence the volume or the size of production as well as the pattern of production in the economy. It may, in the ultimate analysis, produce some beneficial effects on production. High taxation on harmful drugs and commodities will reduce their consumption.

This will discourage production of these commodities and the scarce resources will now be diverted from their production to the other products which are useful for economic growth. Similarly, tax concessions on some products are given in a locality which is considered as backward. Thus, taxation may promote regional balanced development by allocating resources in the backward regions.

However, not necessarily such beneficial effect will always be reaped. There are some taxes which may produce some unfavourable effects on production. Taxes imposed on certain useful products may divert resources from one region to another. Such unhealthy diversion may cause reduction of consumption and production of these products.

### **5. Effects of Taxation on Income Distribution:**

Taxation has both favourable and unfavourable effects on the distribution of income and wealth. Whether taxes reduce or increase income inequality depends on the nature of taxes. A steeply progressive taxation system tends to reduce income inequality since the burden of such taxes falls heavily on the richer persons.

But a regressive tax system increases the inequality of income. Further, taxes imposed heavily on luxuries and nonessential goods tend to have a favourable impact on income distribution. But taxes imposed on necessary articles may have regressive effect on income distribution.

However, we often find some conflicting role of taxes on output and distribution. A progressive system of taxation has favourable effect on income distribution but it has disincentive effects on output.

A high dose of income tax will reduce inequalities but such will produce some unfavourable effects on the ability to work, save, investment and, finally, output. Both the goals—the equitable income distribution and larger output—cannot be attained simultaneously.

### **6. Other Effects of Taxation:**

If taxes produce favourable effects on the ability and the desire to work, save and invest, there will be a favourable effect on the employment situation of a country. Further, if resources collected via taxes are utilized for development projects, it will increase employment in the economy. If taxes affect the volume of savings and investment badly then recession and unemployment problem will be aggravated.

Again, effect of taxes on the price level may be favourable and unfavourable. Sometimes, taxes are imposed to curb inflation. Again, as an imposition of commodity taxes lead to rising costs of production, taxes aggravate the problem of inflation.



Thus, taxation creates both favourable and unfavourable effects on various parameters. Unfavourable effects of taxes can be wiped out by the judicious use of progressive taxation.

The Planning Commission was charged with the responsibility of making assessment of all resources of the country, augmenting deficient resources, formulating plans for the most effective and balanced utilisation of resources and determining priorities. Jawaharlal Nehru was the first Chairman of the Planning Commission.

The first Five-year Plan was launched in 1951 and two subsequent five-year plans were formulated till 1965, when there was a break because of the Indo-Pakistan Conflict. Two successive years of drought, devaluation of the currency, a general rise in prices and erosion of resources disrupted the planning process and after three Annual Plans between 1966 and 1969, the fourth Five-year plan was started in 1969.

The Eighth Plan could not take off in 1990 due to the fast changing political situation at the Centre and the years 1990-91 and 1991-92 were treated as Annual Plans. The Eighth Plan was finally launched in 1992 after the initiation of structural adjustment policies.

For the first eight Plans the emphasis was on a growing public sector with massive investments in basic and heavy industries, but since the launch of the Ninth Plan in 1997, the emphasis on the public sector has become less pronounced and the current thinking on planning in the country, in general, is that it should increasingly be of an indicative nature.

### **Organisation**

The Prime Minister is the Chairman of the Planning Commission, which works under the overall guidance of the National Development Council. The Deputy Chairman and the full time Members of the Commission, as a composite body, provide advice and guidance to the subject Divisions for the formulation of Five Year Plans, Annual Plans, State Plans, Monitoring Plan Programmes, Projects and Schemes.

### **Functions**

The 1950 resolution setting up the Planning Commission outlined its functions as to:

- a. Make an assessment of the material, capital and human resources of the country, including technical personnel, and investigate the possibilities of augmenting such of these resources as are found to be deficient in relation to the nation's requirement;
- b. Formulate a Plan for the most effective and balanced utilisation of country's resources;
- c. On a determination of priorities, define the stages in which the Plan should be carried out and propose the allocation of resources for the due completion of each stage;

- d. Indicate the factors which are tending to retard economic development, and determine the conditions which, in view of the current social and political situation, should be established for the successful execution of the Plan;
- e. Determine the nature of the machinery which will be necessary for securing the successful implementation of each stage of the Plan in all its aspects;
- f. Appraise from time to time the progress achieved in the execution of each stage of the Plan and recommend the adjustments of policy and measures that such appraisal may show to be necessary; and
- g. Make such interim or ancillary recommendations as appear to it to be appropriate either for facilitating the discharge of the duties assigned to it, or on a consideration of prevailing economic conditions, current policies, measures and development programmes or on an examination of such specific problems as may be referred to it for advice by Central or State Governments.

#### Evolving Functions

From a highly centralised planning system, the Indian economy is gradually moving towards indicative planning where Planning Commission concerns itself with the building of a long term strategic vision of the future and decide on priorities of nation. It works out sectoral targets and provides promotional stimulus to the economy to grow in the desired direction.

Planning Commission plays an integrative role in the development of a holistic approach to the policy formulation in critical areas of human and economic development. In the social sector, schemes which require coordination and synthesis like rural health, drinking water, rural energy needs, literacy and environment protection have yet to be subjected to coordinated policy formulation. It has led to multiplicity of agencies. An integrated approach can lead to better results at much lower costs.

The emphasis of the Commission is on maximising the output by using our limited resources optimally. Instead of looking for mere increase in the plan outlays, the effort is to look for increases in the efficiency of utilisation of the allocations being made.

With the emergence of severe constraints on available budgetary resources, the resource allocation system between the States and Ministries of the Central Government is under strain. This requires the Planning Commission to play a mediatory and facilitating role, keeping in view the best interest of all concerned. It has to ensure smooth management of the change and help in creating a culture of high productivity and efficiency in the Government.

The key to efficient utilisation of resources lies in the creation of appropriate self-managed organisations at all levels. In this area, Planning Commission attempts to play a systems

change role and provide consultancy within the Government for developing better systems. In order to spread the gains of experience more widely, Planning Commission also plays an information dissemination role.

### **First Plan (1951–1956)**

The first Indian Prime Minister, Jawaharlal Nehru presented the First Five-Year Plan to the Parliament of India and needed urgent attention. The First Five-year Plan was launched in 1951 which mainly focused in development of the primary sector. The First Five-Year Plan was based on the Harrod–Domar model with few modifications.

The total planned budget of Rs.2069 crore(2378 crore later) was allocated to seven broad areas: irrigation and energy (27.2%), agriculture and community development (17.4%), transport and communications (24%), industry (8.4%), social services (16.64%), rehabilitation of landless farmers (4.1%), and for other sectors and services (2.5%). The most important feature of this phase was active role of state in all economic sectors. Such a role was justified at that time because immediately after independence, India was facing basic problems—deficiency of capital and low capacity to save.

The target growth rate was 2.1% annual gross domestic product (GDP) growth; the achieved growth rate was 3.6% the net domestic product went up by 15%. The monsoon was good and there were relatively high crop yields, boosting exchange reserves and the per capita income, which increased by 8%. National income increased more than the per capita income due to rapid population growth. Many irrigation projects were initiated during this period, including the Bhakra, Hirakud, Mettur Dam and Damodar Valley dams. The World Health Organization (WHO), with the Indian government, addressed children's health and reduced infant mortality, indirectly contributing to population growth.

At the end of the plan period in 1956, five Indian Institutes of Technology (IITs) were started as major technical institutions. The University Grants Commission (UGC) was set up to take care of funding and take measures to strengthen the higher education in the country. Contracts were signed to start five steel plants, which came into existence in the middle of the Second Five-Year Plan. The plan was quasi successful for the government.

### **Second Plan (1956–1961)**

The Second Plan was particularly in the development of the public sector and "rapid Industrialisation". The plan followed the Mahalanobis model, an economic development model developed by the Indian statistician Prasanta Chandra Mahalanobis in 1953. The plan attempted to determine the optimal allocation of investment between productive sectors in order to maximise long-run economic growth. It used the prevalent state of art techniques of

operations research and optimization as well as the novel applications of statistical models developed at the Indian Statistical Institute. The plan assumed a closed economy in which the main trading activity would be centred on importing capital goods.

Hydroelectric power projects and five steel plants at Bhilai, Durgapur, and Rourkela were established with the help of Russia, Britain (the U.K) and West Germany respectively. Coal production was increased. More railway lines were added in the north east.

The Tata Institute of Fundamental Research and Atomic Energy Commission of India was established as research institutes. In 1957 a talent search and scholarship program was begun to find talented young students to train for work in nuclear power.

The total amount allocated under the Second Five-Year Plan in India was Rs.48 billion. This amount was allocated among various sectors: power and irrigation, social services, communications and transport, and miscellaneous. "The target growth rate was 4.5% and the actual growth rate was 4.27%.

### **Third Plan (1961–1966)**

The Third Five-year Plan, stressed agriculture and improvement in the production of wheat, but the brief Sino-Indian War of 1962 exposed weaknesses in the economy and shifted the focus towards the defence industry and the Indian Army. In 1965–1966, India fought a War with Pakistan. There was also a severe drought in 1965. The war led to inflation and the priority was shifted to price stabilisation. The construction of dams continued. Many cement and fertilizer plants were also built. Punjab began producing an abundance of wheat.

Many primary schools were started in rural areas. In an effort to bring democracy to the grass-root level, Panchayat elections were started and the states were given more development responsibilities.

State electricity boards and state secondary education boards were formed. States were made responsible for secondary and higher education. State road transportation corporations were formed and local road building became a state responsibility.

The target growth rate was 5.6%, but the actual growth rate was 2.4%.

Due to miserable failure of the Third Plan the government was forced to declare "plan holidays" (from 1966–67, 1967–68, and 1968–69). Three annual plans were drawn during this intervening period. During 1966–67 there was again the problem of drought. Equal priority was given to agriculture, its allied activities, and industrial sector. The government of India declared "Devaluation of Rupee" to increase the exports of the country. The main reasons for plan holidays were the war, lack of resources, and increase in inflation after that plan holiday was created.

#### **Fourth Plan (1969–1974)**

At this time Indira Gandhi was the Prime Minister. The Indira Gandhi government nationalised 14 major Indian banks and the Green Revolution in India advanced agriculture. In addition, the situation in East Pakistan (now Bangladesh) was becoming dire as the Indo-Pakistan War of 1971 and Bangladesh Liberation War took funds earmarked for industrial development. India also performed the Smiling Buddha underground nuclear test (Pokhran-1) in Rajasthan on May 18, 1974, partially in response to the United States deployment of the Seventh Fleet in the Bay of Bengal. The fleet had been deployed to warn India against attacking West Pakistan and extending the war.

The target growth rate was 5.6%, but the actual growth rate was 3.3%.

#### **Fifth Plan (1974–1978)**

The Fifth Five-Year Plan laid stress on employment, poverty alleviation (Garibi Hatao), and justice. The plan also focused on self-reliance in agricultural production and defence. In 1978 the newly elected Morarji Desai government rejected the plan. The Electricity Supply Act was amended in 1975, which enabled the central government to enter into power generation and transmission.

The Indian national highway system was introduced and many roads were widened to accommodate the increasing traffic. Tourism also expanded. The twenty-point programme was launched in 1975. It was followed from 1974 to 1979.

The Minimum Needs Programme (MNP) was introduced in the first year of the Fifth Five Year Plan (1974–78). The objective of the programme is to provide certain basic minimum needs and thereby improve the living standards of the people. The target growth rate was 4.4% and the actual growth rate was 4.8%.

#### **Rolling Plan (1978–1980)**

The Janata Party government rejected the Fifth Five-Year Plan and introduced a new Sixth Five-Year Plan (1978–1980). This plan was again rejected by the Indian National Congress government in 1980 and a new Sixth Plan was made. The Rolling Plan consists of three kind of plans that were proposed. The First Plan is for the present year which comprises the annual budget and Second is a plan for a fixed number of years, which may be 3, 4 or 5 years. Plan number two is kept changing as per the requirements of the Indian economy. The Third Plan is a perspective plan which is for long terms i.e. for 10, 15 or 20 years. Hence there is no fixation of dates in for the commencement and termination of the plan in the rolling plans. The main advantage of the rolling plans is that they are flexible and are able to overcome the rigidity of fixed five year plans by mending targets, the object of the exercise, projections and

allocations as per the changing conditions in the country's economy. The main disadvantage of this plan is that if the targets are revised each year, it becomes very difficult to achieve them which are laid down in the five-year period and it turned out to be a complex plan. Frequent revisions resulted in lack of stability in the economy which is essential for its balanced development and progress.

### **Sixth Plan (1980–1985)**

The Sixth Five-Year Plan marked the beginning of economic liberalisation. Price controls were eliminated and ration shops were closed. This led to an increase in food prices and an increase in the cost of living. This was the end of Nehruvian socialism. The National Bank for Agriculture and Rural Development was established for development of rural areas on 12 July 1982 by recommendation of the Shivaraman Committee. Family planning was also expanded in order to prevent overpopulation. In contrast to China's strict and binding one-child policy, Indian policy did not rely on the threat of force. More prosperous areas of India adopted family planning more rapidly than less prosperous areas, which continued to have a high birth rate.

The Sixth Five-Year Plan was a great success to the Indian economy. The target growth rate was 5.2% and the actual growth rate was 5.7%.

### **Seventh Plan (1985–1990)**

The Seventh Five-Year Plan was led by the Congress Party with Rajiv Gandhi as the prime minister. The plan laid stress on improving the productivity level of industries by upgrading of technology.

The main objectives of the Seventh Five-Year Plan were to establish growth in areas of increasing economic productivity, production of food grains, and generating employment through "Social Justice".

As an outcome of the Sixth Five-Year Plan, there had been steady growth in agriculture, controls on the rate of inflation, and favourable balance of payments which had provided a strong base for the Seventh Five-Year Plan to build on the need for further economic growth. The Seventh Plan had strived towards socialism and energy production at large. The thrust areas of the Seventh Five-Year Plan were: social justice, removal of oppression of the weak, using modern technology, agricultural development, anti-poverty programmes, full supply of food, clothing, and shelter, increasing productivity of small- and large-scale farmers, and making India an independent economy.

Based on a 15-year period of striving towards steady growth, the Seventh Plan was focused on achieving the prerequisites of self-sustaining growth by the year 2000. The plan expected

the labour force to grow by 39 million people and employment was expected to grow at the rate of 4% per year.

Some of the expected outcomes of the Seventh Five-Year Plan India are given below:

- Balance of payments (estimates): Export – ₹330 billion (US\$5.1 billion), Imports – (-) ₹540 billion (US\$8.4 billion), Trade Balance – (-) ₹210 billion (US\$3.3 billion)
- Merchandise exports (estimates): ₹606.53 billion (US\$9.5 billion)
- Merchandise imports (estimates): ₹954.37 billion (US\$14.9 billion)
- Projections for balance of payments: Export – ₹607 billion (US\$9.5 billion), Imports – (-) ₹954 billion (US\$14.9 billion), Trade Balance- (-) ₹347 billion (US\$5.4 billion)

Under the Seventh Five-Year Plan, India strove to bring about a self-sustained economy in the country with valuable contributions from voluntary agencies and the general populace.

The target growth rate was 5.0% and the actual growth rate was 6.01% and the growth rate of per capita income was 3.7%.

Annual Plans (1990–1992)

### **Eighth Plan (1992–1997)**

In 1989–91 was a period of economic instability in India and hence no five-year plan was implemented. Between 1990 and 1992, there were only Annual Plans. In 1991, India faced a crisis in foreign exchange (forex) reserves, left with reserves of only about US\$1 billion. Thus, under pressure, the country took the risk of reforming the socialist economy. P.V. Narasimha Rao was the tenth Prime Minister of the Republic of India and head of Congress Party, and led one of the most important administrations in India's modern history, overseeing a major economic transformation and several incidents affecting national security. At that time Dr. Manmohan Singh (later Prime Minister of India) launched India's free market reforms that brought the nearly bankrupt nation back from the edge. It was the beginning of liberalization, privatisation and globalization (LPG) in India.

Modernization of industries was a major highlight of the Eighth Plan. Under this plan, the gradual opening of the Indian economy was undertaken to correct the burgeoning deficit and foreign debt. Meanwhile, India became a member of the World Trade Organization on 1 January 1995. The major objectives included, controlling population growth, poverty reduction, employment generation, strengthening the infrastructure, institutional building, tourism management, human resource development, involvement of Panchayati Raj, Nagar Palikas, NGOs, decentralisation and people's participation.

Energy was given priority with 26.6% of the outlay. The target growth rate was 5.6% and the actual growth rate was 6.8%.

To achieve the target of an average of 5.6% per annum, investment of 23.2% of the gross domestic product was required. The incremental capital ratio is 4.1. The saving for investment was to come from domestic sources and foreign sources, with the rate of domestic saving at 21.6% of gross domestic production and of foreign saving at 1.6% of gross domestic production.

### **Ninth Plan (1997–2002)**

The Ninth Five-Year Plan came after 50 years of Indian Independence. Atal Bihari Vajpayee was the Prime Minister of India during the Ninth Five-Year Plan. The Ninth Five-Year Plan tried primarily to use the latent and unexplored economic potential of the country to promote economic and social growth. It offered strong support to the social spheres of the country in an effort to achieve the complete elimination of poverty. The satisfactory implementation of the Eighth Five-Year Plan also ensured the states' ability to proceed on the path of faster development. The Ninth Five-Year Plan also saw joint efforts from the public and the private sectors in ensuring economic development of the country. In addition, the Ninth Five-Year Plan saw contributions towards development from the general public as well as governmental agencies in both the rural and urban areas of the country. New implementation measures in the form of Special Action Plans (SAPs) were evolved during the Ninth Five-Year Plan to fulfill targets within the stipulated time with adequate resources. The SAPs covered the areas of social infrastructure, agriculture, information technology and Water policy.

### **Budget**

The Ninth Five-Year Plan had a total public sector plan outlay of ₹859,200 crore (US\$130 billion). The Ninth Five-Year Plan also saw a hike of 48% in terms of plan expenditure and 33% in terms of the plan outlay in comparison to that of the Eighth Five-Year Plan. In the total outlay, the share of the center was approximately 57% while it was 43% for the states and the union territories.

The Ninth Five-Year Plan focused on the relationship between the rapid economic growth and the quality of life for the people of the country. The prime focus of this plan was to increase growth in the country with an emphasis on social justice and equity. The Ninth Five-Year Plan placed considerable importance on combining growth oriented policies with the mission of achieving the desired objective of improving policies which would work towards the improvement of the poor in the country. The Ninth Five-Year Plan also aimed at correcting the historical inequalities which were still prevalent in the society.



## **Objectives**

The main objective of the Ninth Five-Year Plan was to correct historical inequalities and increase the economic growth in the country. Other aspects which constituted the Ninth Five-Year Plan were:

- Population control
- Generating employment by giving priority to agriculture and rural development
- Reduction of poverty
- Ensuring proper availability of food and water for the poor
- Availability of primary health care facilities and other basic necessities
- Primary education to all children in the country
- Empowering the socially disadvantaged classes like Scheduled castes, Scheduled tribes and other backward classes
- Developing self-reliance in terms of agriculture
- Acceleration in the growth rate of the economy with the help of stable prices

## **Strategies**

- Structural transformations and developments in the Indian economy.
- New initiatives and initiation of corrective steps to meet the challenges in the economy of the country.
- Efficient use of scarce resources to ensure rapid growth.
- Combination of public and private support to increase employment.
- Enhancing high rates of export to achieve self-reliance.
- Providing services like electricity, telecommunication, railways etc.
- Special plans to empower the socially disadvantaged classes of the country.
- Involvement and participation of Panchayati Raj institutions/bodies and Nagar Palikas in the development process.

## **Performance**

- The Ninth Five-Year Plan achieved a GDP growth rate of 5.4% against a target of 6.5%
- The agriculture industry grew at a rate of 2.1% against the target of 4.2%
- The industrial growth in the country was 4.5% which was higher than that of the target of 3%
- The service industry had a growth rate of 7.8%.
- An average annual growth rate of 6.7% was reached.

The Ninth Five-Year Plan looks through the past weaknesses in order to frame the new measures for the overall socio-economic development of the country. However, for a well-planned economy of any country, there should be a combined participation of the governmental agencies along with the general population of that nation. A combined effort of public, private, and all levels of government is essential for ensuring the growth of India's economy.

The target growth was 7.1% and the actual growth was 6.8%.

### **Tenth Plan (2002–2007)**

The main objectives of the Tenth Five-Year Plan were:

- Attain 8% GDP growth per year
- Reduction of poverty rate by 5% by 2007
- Providing gainful and high-quality employment at least to the addition to the labor force
- Reduction in gender gaps in literacy and wage rates by at least 50% by 2007
- 20-point program was introduced
- Target growth: 8.1% – growth achieved: 7.7%
- The tenth plan was expected to follow a regional approach rather than sectoral approach to bring down regional inequalities
- Expenditure of ₹43,825 crore (US\$6.8 billion) for tenth five years

Out of total plan outlay, ₹921,291 crore (US\$140 billion) (57.9%) was for central government and ₹691,009 crore (US\$110 billion) (42.1%) was for states and union territories.

### **Eleventh Plan (2007–2012)**

- It aimed to increase the enrollment in higher education of 18-23 years of age group by 2011-12.
- It focused on distant education, convergence of formal, non-formal, distant and I.T. education institutions.
- Rapid and inclusive growth. (poverty reduction)
- Emphasis on social sector and delivery of service therein.
- Empowerment through education and skill development.
- Reduction of gender inequality.
- Environmental sustainability.
- To increase the growth rate in agriculture, industry and services to 4%, 10% and 9% respectively.

- Reduce total fertility rate to 2.1.
- Provide clean drinking water for all by 2009.
- Increase agriculture growth to 4%.

### **Twelfth Plan (2012–2017)**

The Twelfth Five-Year Plan of the Government of India has been decided to achieve a growth rate of 8.2% but the National Development Council (NDC) on 27 December 2012 approved a growth rate of 8% for the Twelfth Five-Year Plan.

With the deteriorating global situation, the Deputy Chairman of the Planning Commission Montek Singh Ahluwalia has said that achieving an average growth rate of 9 percent in the next five years is not possible. The Final growth target has been set at 8% by the endorsement of the plan at the National Development Council meeting held in New Delhi.

"It is not possible to think of an average of 9% [in the 12th plan]. I think somewhere between 8 and 8.5 percent is feasible," Ahluwalia said on the sidelines of a conference of State Planning Boards and departments. The approached paper for the 12th Plan, approved last year, talked about an annual average growth rate of 9%.

"When I say feasible... that will require major effort. If you don't do that, there is no God given right to grow at 8 percent. I think given that the world economy deteriorated very sharply over the last year...the growth rate in the first year of the 12th Plan (2012–13) is 6.5 to 7 percent."

He also indicated that soon he should share his views with other members of the Commission to choose a final number (economic growth target) to put before the country's NDC for its approval.

The government intends to reduce poverty by 10% during the 12th Five-Year Plan. Ahluwalia said, "We aim to reduce poverty estimates by 9% annually on a sustainable basis during the Plan period". Earlier, addressing a conference of State Planning Boards and Planning departments, he said the rate of decline in poverty doubled during the 11th Plan. The commission had said, while using the Tendulkar poverty line, the rate of reduction in the five years between 2004–05 and 2009–10, was about 1.5%points each year, which was twice that when compared to the period between 1993–95 to 2004–05. The plan aims towards the betterment of the infrastructural projects of the nation avoiding all types of bottlenecks. The document presented by the planning commission is aimed to attract private investments of up to US\$1 trillion in the infrastructural growth in the 12th five-year plan, which will also ensure a reduction in the subsidy burden of the government to 1.5 percent from 2 percent of the GDP

(gross domestic product). The UID (Unique Identification Number) will act as a platform for cash transfer of the subsidies in the plan.

## **NITI Aayog**

The National Institution for Transforming India, also called NITI Aayog, was formed via a resolution of the Union Cabinet on January 1, 2015. The Chairperson of NITI Aayog is the Prime Minister; Shri. Narandira Modi and the vice Chairperson is Dr. Rajiv Kumar. NITI Aayog is the premier policy 'Think Tank' of the Government of India, providing both directional and policy inputs. While designing strategic and long term policies and programmes for the Government of India, NITI Aayog also provides relevant technical advice to the Centre and States.

The Government of India, in keeping with its reform agenda, constituted the NITI Aayog to replace the Planning Commission instituted in 1950. This was done in order to better serve the needs and aspirations of the people of India. An important evolutionary change from the past, NITI Aayog acts as the quintessential platform of the Government of India to bring States to act together in national interest, and thereby fosters Cooperative Federalism.

At the core of NITI Aayog's creation are two hubs – **Team India Hub** and the **Knowledge and Innovation Hub**. The Team India Hub leads the engagement of states with the Central government, while the Knowledge and Innovation Hub builds NITI's think-tank capabilities. These hubs reflect the two key tasks of the Aayog.

NITI Aayog is also developing itself as a State of the Art Resource Centre, with the necessary resources, knowledge and skills, that will enable it to act with speed, promote research and innovation, provide strategic policy vision for the government, and deal with contingent issues.

## **Functions of NITI AAYOG**

### **1. NITI Aayog (National Institution for Transforming India):**

- To evolve a shared vision of national development priorities sectors and strategies with the active involvement of States in the light of national objectives
- To foster cooperative federalism through structured support initiatives and mechanisms with the States on a continuous basis, recognizing that strong States make a strong nation
- To develop mechanisms to formulate credible plans at the village level and aggregate these progressively at higher levels of government
- To ensure, on areas that are specifically referred to it, that the interests of national security are incorporated in economic strategy and policy

- To pay special attention to the sections of our society that may be at risk of not benefiting adequately from economic progress
- To design strategic and long term policy and programme frameworks and initiatives, and monitor their progress and their efficacy. The lessons learnt through monitoring and feedback will be used for making innovative improvements, including necessary mid-course corrections
- To provide advice and encourage partnerships between key stakeholders and national and international like-minded Think tanks, as well as educational and policy research institutions.
- To create a knowledge, innovation and entrepreneurial support system through a collaborative community of national and international experts, practitioners and other partners.
- To offer a platform for resolution of inter-sectoral and inter departmental issues in order to accelerate the implementation of the development agenda.
- To maintain a state-of-the-art Resource Centre, be a repository of research on good governance and best practices in sustainable and equitable development as well as help their dissemination to stake-holders
- To actively monitor and evaluate the implementation of programmes and initiatives, including the identification of the needed resources so as to strengthen the probability of success and scope of delivery
- To focus on technology upgradation and capacity building for implementation of programmes and initiatives
- To undertake other activities as may be necessary in order to further the execution of the national development agenda, and the objectives mentioned above

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