

# **Manonmaniam Sundaranar University**

## **Directorate of Distance and Continuing Education**

**Tirunelveli – 627 012. Tamil Nadu.**

**B.A. Economics  
(Second Year)**

**INTERNATIONAL ECONOMICS - I**

**Prepared by**

**Dr.K.AJITHA. Ph.D**

**Assistant Professor of Economics**

**Manonmaniam Sundaranar University**

**Tirunelveli - 627 012.**

## **INTERNATIONAL ECONOMICS – I**

### **Course Objectives:**

This course will help the students

1. To familiarize with the concept of internal and international trade.
2. To know about various theories of international trade.
3. To gather knowledge about the determination of Terms of Trade
4. To understand the trend in India's balance of payment.
5. To learn the methods of Trade Protection in India.

### **Unit I: Introduction**

Meaning – Internal Trade and External Trade – Difference between Internal and External Trade - Need for International Trade -- Merits and demerits of International Trade.

(15L)

### **Unit II: Theories of International Trade**

David Ricardo - Haberler – Heckscher-Ohlin

(10L)

### **Unit III: Terms of Trade**

Meaning – Types: Net Barter, Gross Barter, Income, Single Factoral, Double Factoral, Real Cost and Utility – Determinants of Terms of Trade.

(10L)

### **Unit IV: Balance of Trade and Balance of Payment**

Meaning – Difference between Balance of Trade and Balance of payment – Structure of BOP – Causes for disequilibrium - Methods for correcting disequilibrium – Recent trends.

(15L)

### **Unit – V Free Trade Vs Protection**

Meaning - Case for and against free Trade and Protection – Methods of Protection.

(10L)

(Total: 60L)

**References:**

- Dominick Salvatore, Introduction to International Economics, John Wiley & Sons, 2012.
- Francis Cherunilam, International Economics, McGraw Hill Education, 2017
- Jhingan, M.L., International Economics, Vrinda Publications, 2016.
- Maria John Kennedy, M., International Economics, PHI Learning Pvt. Ltd, 2014.

**Course Outcomes:**

After the completion of the course, the students will be able to

CO 1: Demonstrate the main theoretical and empirical concepts in international trade and, the basic features of the international trading regime.

CO 2: Explain the various theories of international trade.

CO 3: Name the types of terms of trade and identify the determinants of trade.

CO 4: Differentiate between the balance of trade and balance of payment, list out the causes for disequilibrium in the balance of payment and examine the methods for correcting disequilibrium.

CO 5: Discuss the advantages and disadvantages of free trade and protection.

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## **UNIT - I**

### **INTERNATIONAL TRADE**

#### **1.1. INTRODUCTION**

Inter-regional trade refers to trade between regions within a country. Thus inter regional trade is domestic or internal trade. International trade on the other hand, is trade between two nations or countries. The classical economists held that there were certain fundamental differences between inter regional trade and international trade. Accordingly they propounded a separate theory of international trade which is known as the theory of comparative costs. But modern economists like Bertil Ohlin and Haberler opine that the differences between inter regional and international trade are of degree rather than of kind.

#### **1.2. MEANING**

Trade between two or more countries is called foreign trade or international trade. This involves the exchange of goods and services between the citizens of two countries. When citizens of one country exchange goods and services with the citizens of another country, it is called foreign trade.

#### **1.3. CLASSIFICATION OF INTERNATIONAL TRADE:**

##### **(a) Import Trade:**

It refers to purchase of goods from a foreign country. Countries import goods which are not produced by them either because of cost disadvantage or because of physical difficulties or even those goods which are not produced in sufficient quantities so as to meet their requirements.

##### **(b) Export Trade:**

It means the sale of goods to a foreign country. In this trade the goods are sent outside the country.

### **1.3. CHARACTERISTICS OF INTERNATIONAL TRADE:**

There are various characteristics of international trade are as follows:

#### **(i) Separation of Buyers and Producers:**

In inland trade producers and buyers are from the same country but in foreign trade they belong to different countries.

#### **(ii) Foreign Currency:**

Foreign trade involves payments in foreign currency. Different foreign currencies are involved while trading with other countries.

#### **(iii) Restrictions:**

Imports and exports involve a number of restrictions but by different countries. Normally, imports face many import duties and restrictions imposed by importing country. Similarly, various rules and regulations are to be followed while sending goods outside the country.

#### **(iv) Need for Middlemen:**

The rules, regulations and procedures involved in foreign trade are so complicated that there is a need to take the help of middle men. They render their services for smooth conduct of trade.

#### **(v) Risk Element:**

The risk involved in foreign trade is much higher since the goods are taken to long distances and even cross the oceans.

#### **(vi) Law of Comparative Cost:**

A country will specialise in the production of those goods in which it has cost advantage. Such goods are exported to other countries. On the other hand, it will import those goods which have cost disadvantage or it has no specific advantage.

#### **(vii) Governmental Control:**

In every country, government controls the foreign trade. It gives permission for imports and exports may influence the decision about the countries with which trade is to take place.

### **1.5. INTERNAL TRADE:**

Buying and selling of goods and services within the boundaries of a nation are referred to as internal trade. Whether the products are purchased from a neighbourhood shop in a locality or a central market or a departmental store or a mall or even from any door-to-door salesperson or from an exhibition, all these are examples of internal trade as the goods are purchased from an individual or establishment within a country. No custom duty or import duty is levied on such trade as goods are part of domestic production and are meant for domestic consumption.

Generally, payment has to be made in the legal tender of the country or any other acceptable currency. Internal trade can be classified into two broad categories viz., (i) wholesale trade and (ii) retail trade. Generally, for products, which are to be distributed to a large number of buyers who are located over a wide geographical area, it becomes very difficult for the producers to reach all the consumers or users directly. For example, if vegetable oil or bathing soap or salt produced in a factory in any part of the country are to reach millions of consumers throughout the country, the help of wholesalers and retailers becomes very important. Purchase and sale of goods and services in large quantities for the purpose of resale or intermediate use is referred to as wholesale trade. On the other hand, purchase and sale of goods in relatively small quantities, generally to the ultimate consumers, is referred to as retail trade. Traders dealing in wholesale trade are called wholesale traders and those dealing in retail trade are called retailers. Both retailers and wholesalers are important marketing intermediaries who perform very useful functions in the process of exchange of goods and services between producers and users or ultimate consumers. Internal trade aims at equitable distribution of goods within a nation speedily and at reasonable cost.

### **1.6. EXTERNAL TRADE**

Thus, uneven distribution of natural resources and specialisation attained in production of certain items give rise to exchange of goods and services between different countries. Such exchange is termed as “External Trade”. It is also known as Foreign Trade or International Trade. Every country relies on another to fulfil its needs for specific commodities. For

instance, a country can be wealthy in iron steel and iron but deficient in raw resources such as wheat and spices. As a result, it must source wheat and other food raw materials from several countries with surplus production, such as agriculturally rich countries like India. Furthermore, countries with excess production of specific commodities find exporting these products to other countries advantageous.

Many technologically advanced countries like America achieve specialisation in manufacturing certain items due to sophisticated technology. However, not every country has the advanced technology required; hence, they import products from countries like America. As a result of this unequal distribution of some natural resources and abundance of one particular product, goods and services are exchanged between countries. This process is called external trade, also known as international trade or foreign trade.

### **1.7. DIFFERENCE BETWEEN INTERNAL AND EXTERNAL TRADE:**

Trade means exchange of goods. What difference, then, does it make to the theory of trade whether these goods are made in the same country or in different countries?

Why is a separate theory of international trade needed? Well, domestic and foreign trade are really one and the same. They both imply exchange of goods between persons. They both aim at achieving increased production through division of labour. There are, however, a number of things which make a difference between foreign trade and domestic trade and necessitate a separate theory of international trade. They are as under:

#### **(i) Immobility of Factors of Production:**

Labour and capital do not move freely from one country to another as they do within the same country. “Man”, declared Adam Smith, “is, of all forms of luggage, the most difficult to transport”. Much more so when a foreign frontier has to be crossed. Hence differences in the cost of production cannot be removed by moving men and money, the result is the movement of goods. On the contrary, between regions within the same political boundaries, people distribute themselves more or less according to opportunities. Real wages and standard of living tend to seek a common level, though they are not wholly



uniform. As between nations, however, these differences continue to persist for wages and check population movements. Capital also does not move freely from- one country to another. Capital is notoriously shy.

**(ii) Different Currencies:**

Each country has a different currency. India for instance, has the rupee, the U.S.A. the dollar, Germany the mark, Italy the lira, Spain the peso, Japan the yen, and so on. Hence, buying and selling between nations give rise to complications absent in internal trade.

**(iii) Restrictions on Trade:**

Trade between different countries is not free. Very often there are restrictions imposed by custom duties, exchange restrictions, fixed quotas or other tariff barriers. For example, our own country has imposed heavy duties on import of motor cars, wines and liquors and other luxury goods.

**(iv) Ignorance:**

Knowledge of other countries cannot be as exact and full as of one's own country. Differences in culture, language and religion stand in the way of free communication between different countries. On the other hand, within the borders of a country, labour and capital freely move about. These factors, too, make internal trade different from international trade.

**(v) Transport and Insurance Costs:**

Then costs of transport and insurance also check- free international trade. The greater the distance between the two countries, the greater are these costs. Wars increase them still more.

**Conclusion:**

Thus, comparative immobility of labour and capital, restrictions on trade, transport and other costs, ignorance, and differences in language, customs, laws and currency systems make international trade different from domestic trade and necessitate a separate theory of international trade.

**1.8. NEED FOR INTERNATIONAL TRADE:**

In today's world, economic life has become more complex and diversified. No country can live in isolation and claim to be self-sufficient. Even countries with different ideologies, culture, and political, social and

economic structure have trade relations with each other. Thus, trade relations of U.S.A. with U.S.S.R. and China with Japan are examples. The aim of international trade is to increase production and to raise the standard of living of the people. International trade helps citizens of one nation to consume and enjoy the possession of goods produced in some other nation.

There is a need of international trade due to the following reasons:

**(i) Uneven Distribution of Natural Resources:**

Natural resources of the world are not evenly divided among the nations of the world. Different countries of the world have different amount of natural resources and they differ with each other in regard to climate, minerals and other factors. Some countries can produce more of sugar like Cuba, some can produce more of cotton like Egypt, while there are some others which can produce more of wheat like Argentina. But all these countries need sugar, cotton and wheat. So they have to depend upon one another for the exchange of their surpluses with the goods that are in short supply in their country and hence the need for international trade is natural.

**(ii) Division of Labour and Specialisation:**

Due to uneven distribution of natural resources, some countries are more suitably placed to produce some goods more economically than other countries. But they are geographically at a disadvantageous position to produce other goods. They specialise in the production of such goods in which they have some natural advantage in the form of availability of raw material, labour, technical know-how, climatic conditions, etc. and get other goods in exchange for these goods from other countries.

**(iii) Differences in Economic Growth Rate:**

There are many differences in the economic growth rate of different countries. Some countries are developed some are developing, while there are some other countries which are under-developed: these under-developed and developing countries have to depend upon developed ones for financial help, which ultimately encourages international trade.

**(iv) Theory of Comparative Cost:**

According to the theory of comparative cost, each country should concentrate on the production of those goods for which it is best suited, taking

into account its natural resources, climate, labour supply, technical know-how and the level of development. Each country specialises in the production of those goods which it can produce at the lowest cost as compared to other countries, which leads to international specialisation and division of labour. This reduces the cost of production all over the world and improves the standard of living of the people in various countries. Hence the theory of comparative cost encourages international trade.

## **1.9. MERITS AND DEMERITS OF INTERNATIONAL TRADE:**

### **1.9.1. ADVANTAGES OF INTERNATIONAL TRADE:**

#### **(i) Optimal use of natural resources:**

International trade helps each country to make optimum use of its natural resources. Each country can concentrate on production of those goods for which its resources are best suited. Wastage of resources is avoided.

#### **(ii) Availability of all types of goods:**

It enables a country to obtain goods which it cannot produce or which it is not producing due to higher costs, by importing from other countries at lower costs.

#### **(iii) Specialisation:**

Foreign trade leads to specialisation and encourages production of different goods in different countries. Goods can be produced at a comparatively low cost due to advantages of division of labour.

#### **(iv) Advantages of large-scale production:**

Due to international trade, goods are produced not only for home consumption but for export to other countries also. Nations of the world can dispose of goods which they have in surplus in the international markets. This leads to production at large scale and the advantages of large scale production can be obtained by all the countries of the world.

#### **(v) Stability in prices:**

International trade irons out wild fluctuations in prices. It equalizes the prices of goods throughout the world (ignoring cost of transportation, etc.)

**(vi) Exchange of technical know-how and establishment of new industries:**

Underdeveloped countries can establish and develop new industries with the machinery, equipment and technical know-how imported from developed countries. This helps in the development of these countries and the economy of the world at large.

**(vii) Increase in efficiency:**

Due to international competition, the producers in a country attempt to produce better quality goods and at the minimum possible cost. This increases the efficiency and benefits to the consumers all over the world.

**(viii) Development of the means of transport and communication:**

International trade requires the best means of transport and communication. For the advantages of international trade, development in the means of transport and communication is also made possible.

**(ix) International co-operation and understanding:**

The people of different countries come in contact with each other. Commercial intercourse amongst nations of the world encourages exchange of ideas and culture. It creates co-operation, understanding, and cordial relations amongst various nations.

**(x) Ability to face natural calamities:**

Natural calamities such as drought, floods, famine, earthquake etc., affect the production of a country adversely. Deficiency in the supply of goods at the time of such natural calamities can be met by imports from other countries.

**(xi) Other advantages:**

International trade helps in many other ways such as benefits to consumers, international peace and better standard of living.

**1.9.2. DISADVANTAGES OF INTERNATIONAL TRADE:**

Though foreign trade has many advantages, its dangers or disadvantages should not be ignored.

**(i) Impediment in the Development of Home Industries:**

International trade has an adverse effect on the development of home industries. It poses a threat to the survival of infant industries at home. Due

to foreign competition and unrestricted imports, the upcoming industries in the country may collapse.

**(ii) Economic Dependence:**

The underdeveloped countries have to depend upon the developed ones for their economic development. Such reliance often leads to economic exploitation. For instance, most of the underdeveloped countries in Africa and Asia have been exploited by European countries.

**(iii) Political Dependence:**

International trade often encourages subjugation and slavery. It impairs economic independence which endangers political dependence. For example, the Britishers came to India as traders and ultimately ruled over India for a very long time.

**(iv) Miss the Utilisation of Natural Resources:**

Excessive exports may exhaust the natural resources of a country in a shorter span of time than it would have been otherwise. This will cause economic downfall of the country in the long run.

**(v) Import of Harmful Goods:**

Import of spurious drugs, luxury articles, etc. adversely affects the economy and well-being of the people.

**(vi) Storage of Goods:**

Sometimes the essential commodities required in a country and in short supply are also exported to earn foreign exchange. This results in shortage of these goods at home and causes inflation. For example, India has been exporting sugar to earn foreign trade exchange; hence the exalting prices of sugar in the country.

**(vii) Danger to International Peace:**

International trade gives an opportunity to foreign agents to settle down in the country which ultimately endangers its internal peace.

**(viii) World Wars:**

International trade breeds rivalries amongst nations due to competition in the foreign markets. This may eventually lead to wars and disturb world peace.

**(ix) Hardships in times of War:**

International trade promotes lopsided development of a country as only those goods which have comparative cost advantage are produced in a country. During wars or when good relations do not prevail between nations, many hardships may follow.

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## UNIT - II

### THEORIES OF INTERNATIONAL TRADE

#### 2.1. COMPARATIVE COST THEORY

David Ricardo believed that the international trade is governed by the comparative cost advantage rather than the absolute cost advantage. A country will specialise in that line of production in which it has a greater relative or comparative advantage in costs than other countries and will depend upon imports from abroad of all such commodities in which it has relative cost disadvantage. Suppose India produces computers and rice at a high cost while Japan produces both the commodities at a low cost. It does not mean that Japan will specialise in both rice and computers and India will have nothing to export. If Japan can produce rice at a relatively lesser cost than computers, it will decide to specialise in the production and export of computers and India, which has less comparative cost disadvantage in the production of rice than computers will decide to specialise in the production of rice and export it to Japan in exchange of computers.

**The Ricardian comparative costs analysis is based upon the following assumptions:**

- There is no intervention by the government in economic system.
- Perfect competition exists both in the commodity and factor markets.
- There are static conditions in the economy. It implies that factors supplies, techniques of production and tastes and preferences are given and constant.
- Production function is homogeneous of the first degree. It implies that output changes exactly in the same ratio in which the factor inputs are varied. In other words, production is governed by constant returns to scale.
- Labour is the only factor of production and the cost of producing a commodity is expressed in labour units.
- Labour is perfectly mobile within the country but perfectly immobile among different countries.

- Transport costs are absent so that production cost, measured in terms of labour input alone, determines the cost of producing a given commodity.
- There are only two commodities to be exchanged between the two countries.
- Money is non-existent and prices of different goods are measured by their real cost of production.
- There is full employment of resources in both the countries.
- Trade between two countries takes place on the basis of barter.

This two-country, two-commodity model can be analysed through the Table 2.1.

**Table 2.1. Labour cost of production**

Country	Labour cost per unit of commodity in man-hours	
	Commodity X	Commodity Y
A	12	10
B	16	12

The Table 2.1 indicates that country A has an absolute advantage in producing both the commodities through smaller inputs of labour than in country B. In relative terms, however, country A has comparative advantage in specialising in the production and export of commodity X while country B will specialise in the production and export of commodity Y.

In country A, domestic exchange ratio between X and Y is 12: 10, i.e., 1 unit of X = 12/10 or 1.20 units of Y. Alternatively, 1 unit of Y= 10/12 or 0.83 units of X.

In country B, the domestic exchange ratio is 16: 12, i.e., 1 unit of X = 16/12 or 1.33 units of Y. Alternatively, 1 unit of Y = 16/12 or 0.75 unit of X. From the above cost ratios, it follows that country A has comparative cost advantage in the production of X and B has comparatively lesser cost disadvantage in the production of Y.



In algebraic terms, let labour cost of producing X-commodity in country A is  $a_1$  and in country B is  $a_2$ . The labour cost of producing Y-commodity in countries A and B are respectively  $a_3$  and  $a_4$ .

**The absolute differences in costs can be measured as:**

$$a_1 / a_2 < 1 < a_3/a_4$$

It shows that country A has absolute advantage in producing X and country B has an absolute advantage in commodity Y.

**The comparative differences in costs can be measured as:**

$$a_1 / a_2 < a_3/a_4 < 1$$

The Table 2.3 satisfies the condition specified for comparative difference in costs;

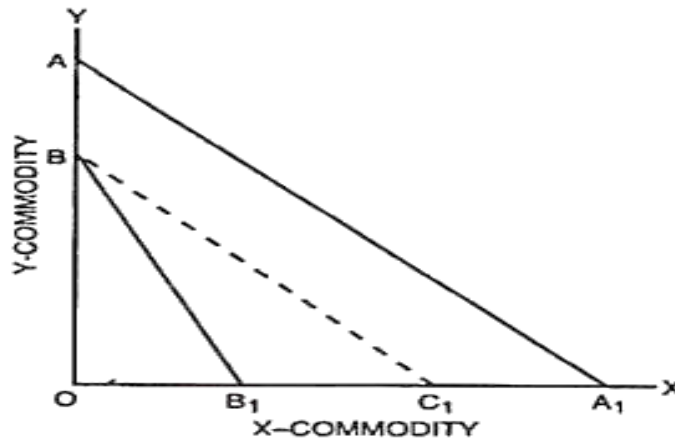
$$a_1 / a_2 < 1 < a_3/a_4 < 1$$

$$12/16 < 10/12 < 1$$

In case  $a_1/a_2 = a_3/a_4$ , there are equal differences in costs and there is no possibility of trade between the two countries.

In Fig. 2.1,  $AA_1$  and  $BB_1$  are the production possibility curves pertaining to countries A and B. Given the same amount of productive resources, A can produce larger quantities of both the commodities than the country B. It means country A has absolute cost advantage over B in respect of both the commodities. If the curve  $BC_1$  is drawn parallel to  $AA_1$ ; the curve  $BC_1$  can represent the production possibility curve of country A. If country A gives up  $OB$  quantity of Y and diverts resources to the production of X, it can produce  $OC_1$  quantity of X, which is more than  $OB_1$ . It means the country A has comparative cost advantage in the production of X-commodity.

From the point of view of B, it can produce the same quantity  $OB$  of Y, if it gives up the production of smaller quantity  $OB_1$  of X. It signifies that country B has less comparative disadvantage in the production of Y commodity. Accordingly, country A will specialise in the production and export of X commodity, while country B will specialise in the production and export of Y-commodity.



**Fig.2.1. Comparative cost theory**

**Gain from Trade:**

The comparative cost principle underlines the fact that two countries will stand to gain through trade so long as the cost ratios for two countries are not equal. On the basis of Table 2.1, country A specialises in the production of X commodity, while country B specialises in the production of Y commodity.

**In the absence of international trade, the domestic exchange ratio between X and Y commodities in these two countries are:**

Country A: 1 unit of X = 12/10 or 1.20 units of Y

Country B: 1 unit of Y = 12/16 or 0.75 unit of X

If trade takes place and two countries agree to exchange 1 unit of X for 1 unit of Y, the gain from trade for country A amounts to 0.20 units of Y for each unit of X. In case of country B, the gain from trade amounts to 0.25 unit of X for each unit of Y. Thus the comparative costs principle confers gain upon both the countries.

**2.2. HABERLER OPPORTUNITY COST THEORY:**

Gottfried Haberler has attempted to restate the comparative costs in terms of opportunity cost. He demonstrates that the doctrine of comparative costs can hold valid even if the labour theory of value is discarded. The theory determines the cost of producing a commodity in terms of the alternative production that has to be foregone for producing the commodity in question. Elaborating upon the opportunity cost, Haberler writes that “the marginal cost of a given quantity X of a commodity A must be regarded as that quantity of commodity B which must be foregone in order that X, instead of (X-1) units

of A can be produced. The exchange ratio on the market between A and B must equal their costs in this sense of the terms.”

The opportunity cost is what has been given up in order to have some quantity of another thing. If an additional unit of one commodity has to be produced, the productive resources are to be diverted from the production of some other commodity to the given commodity. The resultant decrease in the quantity of the second commodity represents the opportunity cost of the additional quantity of the given commodity. For instance, if India has to reduce the production of cotton by 2 lakh bales in order to raise the production of wheat by 1 lakh tons, then the opportunity cost of one unit of wheat is two units of cotton ( $1W = 2C$ ).

Haberler made use of opportunity cost curve to express the opportunity cost of one commodity in terms of the other. The opportunity cost curve has been called as the ‘transformation curve’ or ‘production possibility curve’ by Paul Samuelson and ‘production frontier’ or ‘production indifference curve’ by A.P. Lerner.

### **Assumptions of Haberler’s Opportunity Cost Theory:**

Haberler’s opportunity cost theory rests upon the following main assumptions:

- ❖ The economic system is in a state of full employment equilibrium.
- ❖ There is perfect competition in commodity and factor markets.
- ❖ Price of each commodity equals the marginal cost of producing it.
- ❖ Price of each factor equals its marginal productivity.
- ❖ The supply of factors is fixed.
- ❖ The state of technology is given.
- ❖ There are two trading countries A and B.
- ❖ Each country produces two commodities, say X and Y.
- ❖ Each country has two productive factors- capital and labour.
- ❖ There is perfect factor mobility within each country.
- ❖ The factors of production are perfectly immobile between the two countries.
- ❖ Neither of the two countries imposes any restrictions upon international trade.

On the basis of the above assumptions, it is possible to determine the opportunity cost curve or the production possibility curve of any country. The production possibility curve indicates different combinations of two commodities that a country can produce with the given factor endowments and technology. The slope of the production possibility curve is determined by the ratio of units of the commodity given up in order to have one unit of the other commodity. This ratio is termed as a marginal rate of transformation (MRT).

If two commodities X and Y are being produced by a country and some quantities of labour, capital and other inputs are diverted from the production of Y to the production of X, the additional production of X involves the sacrifice of some quantity of Y. In other words, certain units of Y given up have been transformed into the marginal unit of X. The rate at which marginal unit of X is being substituted for certain units of Y is called the marginal rate of transformation.

$$\text{MRT}_{xy} = - \frac{\delta Y}{\delta X}$$

Alternatively, the  $\text{MRT}_{xy}$  can be defined as a ratio of the marginal cost of X to the marginal cost of Y.

This can be derived as below:

$$\delta C = \frac{\delta C}{\delta X} \cdot \delta X + \frac{\delta C}{\delta Y} \cdot \delta Y$$

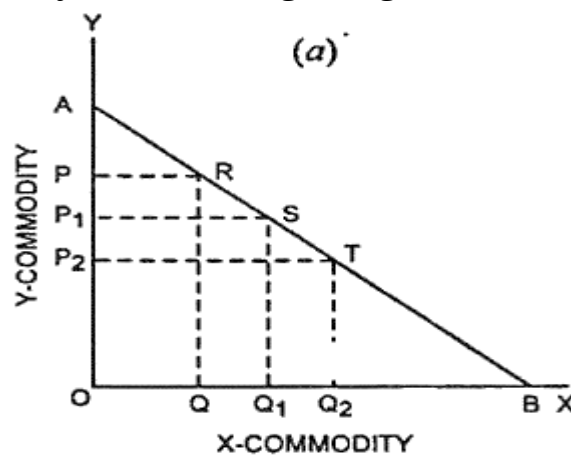
Here  $\delta C$  stands for change in total cost,  $\delta C/\delta X$  and  $\delta C/\delta Y$  are the marginal costs of X and Y commodities respectively.

Assuming infinitesimally small changes in X and Y,  $\delta C$  will be equal to zero.

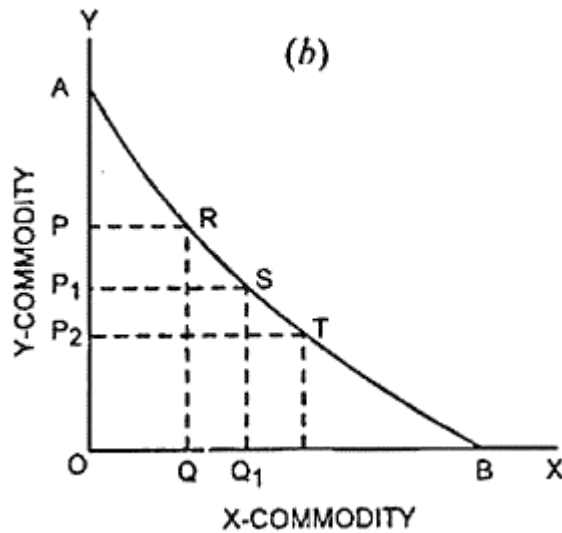
$$\begin{aligned} \delta C &= 0 \\ \therefore \frac{\delta C}{\delta X} \cdot \delta X + \frac{\delta C}{\delta Y} \cdot \delta Y &= 0 \\ \text{or } \frac{\delta C}{\delta Y} \cdot \delta Y &= - \frac{\delta C}{\delta X} \cdot \delta X \\ \text{or } - \frac{\delta Y}{\delta X} &= \frac{\delta C / \delta X}{\delta C / \delta Y} \\ \text{or } \text{MRT}_{xy} &= - \frac{\delta Y}{\delta X} = \frac{\delta C / \delta X}{\delta C / \delta Y} \end{aligned}$$

Since the  $\text{MRT}_{xy}$  is negative, the opportunity cost curve or transformation curve slopes down from left to right. The opportunity cost curve may be a straight line, convex to the origin or concave to the origin, depending on whether return to scale in a country is constant, increasing or decreasing respectively.

At every point on the straight-line opportunity cost curve AB in Fig. 2.2 (a) the  $\text{MRT}_{xy}$  remains equal,  $\text{MRT}_{xy} = - \delta Y / \delta X = PP_1 / OQ_1 = P_1P_2 / Q_1Q_2$ . It also signifies that marginal costs of X and Y remains unchanged and production of both the commodities is governed by constant returns to scale or constant opportunity cost. It implies that all factors of production are equally efficient in all lines of production. Since this is not true in real life, the production possibility curve is not likely to be a falling straight line.



**Fig.2.2 (a)**



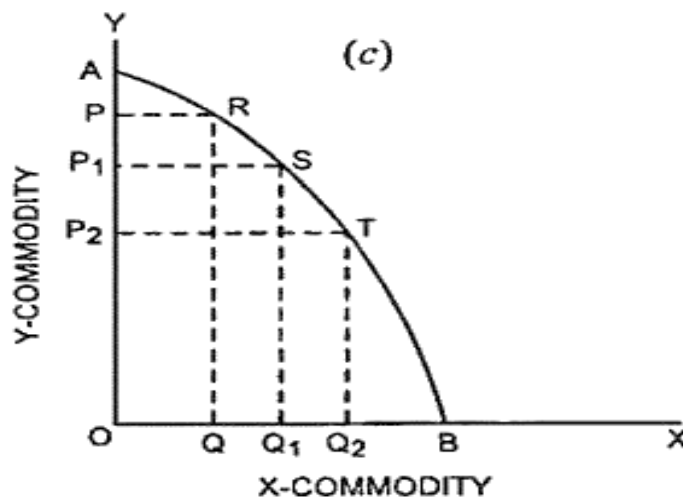
**Fig. 2.2 (b)**

In Fig. 2.2 (b), the opportunity cost curve AB is a falling convex towards the origin,  $MRT_{xy}$  in this case goes on decreasing.

$$(PP_1/QQ_1 > P_1P_2/Q_1Q_2)$$

This happens when production is governed by increasing returns to scale or the cost of X in terms Y goes on diminishing as less and less units of Y are given up in order to have more units of X. Even this situation is not realistic because larger production of X will cause reduced significance of X for the commodity in terms of the commodity Y. This figure, on the opposite, indicates increasing marginal significance of X.

In Fig. 2.2 (c), the opportunity cost curve AB is a falling concave curve towards the origin. In this case,  $MRT_{xy}$  goes on increasing ( $PP_1/QQ_1 < P_1P_2/Q_1Q_2$ ).



**Fig.2.2 (c)**

The opportunity cost curve assumes this slope, when production is governed by diminishing returns to scale. As there is an increase in the production of X commodity, MC of X rises while that of Y decreases. This case seems to be more realistic because in this situation, a greater availability of X commodity shows a decreasing significance of this commodity in terms of units of Y commodity.

### **2.3. HECKSCHER-OHLIN THEOREM**

Ohlin's theory explains the real cause of this difference. Ohlin did not invalidate the classical theory but accepted the comparative advantage as the cause of international trade and then tried to examine and analyse it further in a moral and logical manner. Thus, Ohlin's theory supplements but does not supplant the Ricardian theory.

Ohlin states that trade results on account of the different relative price of different goods in different countries. The relative price commodity difference is the result of relative costs and factor price differences in different countries. Differences in factor prices are due to differences in factor endowments in different countries. It, thus, boils down to the fact that trade occurs because different countries have different factor endowments. Ohlin's theory is, therefore, also described as the factor endowment theory or the factor proportions analysis. Ohlin's theory is usually expounded in terms of a two-factor model with labour and capital as the two factors of endowments. The gist of the theory is: what determine trade are differences in factor endowments. Some countries have plenty of capital; others have an abundance of labour. The Heckscher-Ohlin theorem is: countries which are rich in labour will export labour intensive goods and countries which have plenty of capital will export capital-intensive products.

#### **OHLIN'S SIMPLE MODEL:**

**Ohlin makes the following assumptions of a simplified static model to the analysis:**

1. There are two countries A and B.
2. There are two factors, labour and capital.

3. There are two goods; X and Y of which X is labour-intensive and Y is capital-intensive.
4. Country A is labour-abundant country B is capital-rich.
5. There is perfect competition in both the commodity and factor markets.
6. All production functions are homogeneous of the first degree. Hence there are constant returns to the scale.
7. There are no transport costs or other impediments to trade.
8. Demand conditions are identical in both the countries.

These assumptions have been made to explain the meaning of comparative price advantage or relative price difference and to deduce the major propositions of the factor endowment theory.

Given these assumptions, Ohlin's thesis contends that, country exports goods which use relatively a greater proportion of its relatively abundant and thus cheap factors. It is implied that trade occurs because there are differences in relative commodity prices caused by differences in relative factor prices (thus a comparative advantage) as a result of differences in the factor endowments among the countries.

The "relative factor abundance" in the thesis has two conceptions (a) the price criterion of relative factor abundance; and (b) the physical criterion factor abundance.

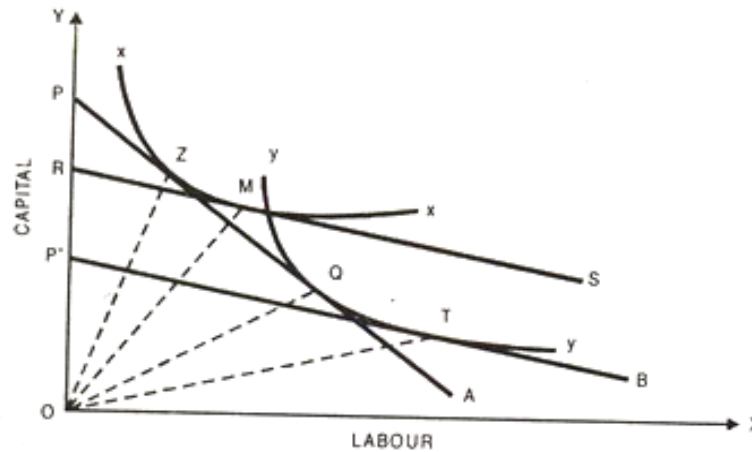
**The Price Criterion of Relative Factor Abundance:**

According to the price criterion, a country having capital relatively cheap and labour relatively dear is regarded as relatively capital-abundant, irrespective of its ratio of total quantities of capital to labour in comparison with the other country. In symbolic terms, when:

$$(PK/PL) A < (PK/PL) B$$

Country A is relatively capital-abundant. (Here P stands for factor price and K for capital, L for labour, A and B for the two respective countries.) Ohlin's theorem may be verified diagrammatically in Fig. 2.3





**Fig.2.3 the price criterion of relative factor abundance**

Fig. 2.3 depicts  $xx$  and  $yy$  isoquants (equal product curves) for two goods X and Y respectively. These two isoquants intersect only once so that the goods X and Y can be classified unambiguously according to factor intensity. It is easy to see that  $x$  is relatively capital-intensive, since the amount of capital is represented on the vertical axis. Similarly, good Y is labour-intensive, since the amount of labour is represented on the horizontal axis. If the isoquants intersect more than once, good X will not always be capital intensive relative to Y. Let us assume that there are two countries A and B A is the relatively capital-abundant and B is labour abundant. Now all possible factor combinations (of labour and capital) that can produce the given amounts of two goods X and Y in each country can be read off from the two isoquants. Economically, the most efficient factor combination, however, depends upon the relative factor prices. To consider this, let us assume that the slope of the line P represents the relative factor prices in country A, i.e.,  $(PK/PL)_A$ . The line PA is tangent to  $yy$  isoquant at point Q. Similarly,  $xx$  isoquant is also tangential to PA at point Z. Since we have assumed that  $(PK/PL)_A < (PK/PL)_B$  i.e., capital in A is relatively cheaper, the slope of the line representing relative factor prices  $(PK/PL)$  in B must be less than that of PA. Thus, line P'B is supposed to represent factor ratio in B. Line P'B is tangent to the isoquant  $yy$  at point T. Now, the line RS is drawn parallel to P'B such that it becomes tangent to the isoquant  $xx$  at point M. Line RS lies above the line P'B implying that OR intercept of RS on the capital axis is greater than OP', the intercept of P'B' on the same axis.

Under these assumptions, it appears that the equilibrium factor proportions are OZ for good X and OQ for Y in country A. That means, the cost of producing the given amount of X in country A is the cost of using the quantities of two factors – labour and capital – indicated by OZ at relative factor prices given by PA. This is equal to the cost of using capital in the amount of OP (the point at which PA cuts the capital axis). Similarly, the cost of producing the given amount of Y in country A is equal to the cost of using capital in the same quantity (OP).

In country B, similarly, the equilibrium factor proportions are OM for X and OOT for good Y. The relative factor prices are shown by P'B (or RS). And therefore, the costs of producing the given amounts of X and Y (as assumed for country A) in this country are, in terms of capital, OR and OP respectively. Evidently, in country B the given amount of goods X is more expensive than the given amount of good Y. Comparing the relative costs of the equal amounts of the two goods X and Y in the countries A and B, we thus find good X is relatively cheaper in A and good Y is relatively cheaper in B. That means, the capital-abundant country has a comparative cost advantage in producing a capital-intensive good. So with the opening of trade with the other country, it must export such goods only. Likewise, the labour abundant country must export labour-intensive goods.

This is how the Heckscher-Ohlin theorem confines to the position that: a country exports goods produced relatively cheaper by using a relatively greater proportion of its relatively abundant factor. Though this conclusion has been inferred without consideration of demand conditions or factor endowments, it may be said that the data about relative factor prices do presuppose the given demand conditions and factor endowments in the two countries, obviously because the prices of factors are determined by the interaction of the supply of and demand for factors. However, the demand for factors, being a derived demand, depends, along with the technical conditions of production, on the demand for final commodities produced by them.

### **The Physical Criterion of Relative Factor Abundance:**

Viewing the physical criteria, strictly implying relative factor endowments in physical quantities, a country is relatively capital-abundant only if it

possesses a greater proportion of capital to labour as compared to the other country. To put it symbolically, then

$$(K/L)_A > (K/L)_B$$

Country A is relatively capital-abundant, whether or not the ratio of the prices of capital to labour is lower than in country B. Using the price criterion of relative factor abundance, Ohlin's conclusion can be traced immediately from the assumptions made above, without consideration of demand conditions or factor proportions. But if the physical criterion is viewed, demand conditions are to be considered in order to establish the theorem.

Ohlin, it seems, chooses the former criterion of determining the relative factor abundance and relative cheapness inter-changeably; but, he also lays down that the difference in factor prices is due to the difference in the relative endowment of the factors between countries. He thus asserts that once the relative physical quantities of each productive factor endowed in both the countries are known, the relative factor-price structure for each country can be easily inferred. Evidently, a country possessing relatively abundant capital will have a factor price structure such that capital will be cheaper as compared to labour (relatively scarce factor). It follows, thus, that a relatively cheaper factor in a country implies that it is relatively abundant.

Hence, considering physical quantities and scarcities rather than economic scarcities, Ohlin assumes that the supply aspect has a greater significance than demand in determining the relative factor prices in a country.

Ohlin, then, stresses the point that the factor-price structure will be different in two countries when the factor endowments are in differing proportions. Comparative advantages thus arise when the capital-abundant country (A) exports capital-intensive goods and imports labour-intensive goods and the labour abundant country (B) exports labour intensive goods and imports capital-intensive goods; because,  $(PK/PL)_A < (PK/PL)_B < (PK/PL)_A$ . If relative factor endowments are identical in two countries and commodity factor intensities are also the same, there will be no comparative price differences  $(PK/PL)_A = (PK/PL)_B$ ; there is no comparative cost difference); hence no theoretical basis for international trade.

## **The Gist of the Theory:**

### **In a nutshell, we can interpret Ohlin's theory as under:**

- ❖ Two countries A and B will involve themselves in trade, if relative price of goods X and Y are different. To quote Ohlin, "the immediate cause of inter-regional trade is always that goods can be bought cheaper from outside in terms of money than they can be produced at home."
- ❖ Under comparative market conditions, prices are equal to average costs. Thus, relative price differences are an account of cost differences.
- ❖ Cost differences are taking place because of the factor price differences in the two countries.
- ❖ Factor prices are determined by factors' supply and demand. Assuming a given demand, it follows that a capital-rich country has a cheaper or a lower capital price and a labour-abundant country has a relatively lower labour price.
- ❖ In our model, thus, factor-price ratio Price of Labour/Price of Capital in country A is lower than the ratio Price of Labour/Price of Capital in B.
- ❖ Ohlin states that each region has advantages in the production of goods into which enter considerable amounts of factors abundant and cheap in that region.
- ❖ Since X is a labour-intensive product in country A, it will be cheaper than in B, because labour is relatively cheaper in A. Similarly Y, the capital-intensive product in country B, is relatively cheaper as B is a capital-rich country and the price of capital is relatively lower.
- ❖ It follows that country A will tend to specialise in the production of X and export its surplus. Likewise, B will specialise in Y and export it.
- ❖ In short, a capital-rich and capital-cheap country exports capital intensive products while a labour-abundant and labour-cheap country exports labour-intensive products.

It also follows that trade takes place because of factor-endowment difference and their international immobility. Sodersten writes, "In a world where factors of production cannot move among countries but where goods can move freely, trade in goods can be viewed as a substitution for factor mobility."

**Thus, Ohlin's theory concludes that:**

- i. The basis of internal trade is the difference in commodity prices in the two countries.
- ii. Differences in commodity prices are due to cost differences which are the results of differences in factor endowments in the two countries.
- iii. A capital-rich country specialises in labour-intensive goods and exports them. A labour-abundant country specialises in labour-intensive goods and exports them.

Ohlin gives the illustration of Australia and England in support of his theory. In Australia, land is plenty and cheap, while labour and capital are scanty and dear. So, Australia specialises in goods like wheat, wool, meat, etc., which are relatively produced cheaper here on account of their specific production functions requiring a larger proportion of land but little use of capital. On the other hand, England is capital-rich but labour- poor.

Thus, goods requiring plenty of capital will tend to be relatively cheaper in England. Examining the trade between England and Australia, it may be observed that Australia imports manufactured or capital-intensive goods from England and exports wheat, meat, etc. Thus, Australia's import is indirectly an import of scarce factors and her export is indirectly an export of factors in abundant supply.

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**UNIT - III**  
**TERMS OF TRADE**

**3.1. MEANING**

The terms of trade refer to the rate at which the goods of one country exchanges for the goods of other countries. Thus, terms of trade determine the international values of commodities. Obviously, the terms of trade depend upon the prices of exports a country and the prices of its imports.

When the prices of exports of a country are higher as compared to those of its imports, it would be able to obtain greater quantity of imports for a given amount of its exports. In this case terms of trade are said to be favourable for the country as its share of gain from trade would be relatively larger. On the contrary, if the prices of its exports are relatively lower than those of its imports, it would get smaller quantity of imported goods for a given quantity of its exports. Therefore, in this case, terms of trade are said to be unfavourable to the country as its share of gain from trade would be relatively smaller. In what follows we first explain the various concepts of the terms of trade and then explain how they are determined.

**3.2. CONCEPTS OF TERMS OF TRADE:**

Jacob Viner and G.M. Meier have discussed many types of terms of trade which we take up one by one.

**1. COMMODITY OR NET BARTER TERMS OF TRADE:**

The most widely used concept of the terms of trade is what has been named the net barter terms of trade which refers to the relation between prices of exports and prices of imports. In symbolic terms:

$$T_n = P_x/P_m$$

Where

$T_n$  stands for net barter terms of trade.

$P_x$  stands for price of exports (x),

$P_m$  stands for price of imports (m).

When we want to know the changes in net barter tends of trade over a period of time, we prepare the price index numbers of exports and imports by choosing a certain appropriate base year and obtain the following ratio:

$$P_{x1}/ P_{m1}: P_{x0}/ P_{m0}$$

where  $P_{x_0}$  and  $P_{m_0}$  stand for price index numbers of exports and imports in the base year respectively, and  $P_{x_1}$  and  $P_{m_1}$  denote price index numbers of exports and imports respectively in the current year. Since the prices of both exports and imports in the base year are taken as 100, the terms of trade in the base year would be equal to one

$$P_{x_0} / P_{m_0} = 100 / 100 = 1$$

The concept of the commodity or net barter terms of trade has been used by economists to measure the gain from international trade. The terms of trade as determined by the offer curves in the Mill Marshall analysis, are related to the commodity terms of trade. But the concept of net barter terms of trade suffers from some important limitations in that it shows nothing about the changes in the volume of trade. If the prices of exports rise relatively to those of its imports but due to this rise in prices, the volume of exports falls substantially, then the gain from rise in export prices may be offset or even more than offset by the decline in exports.

This has been well described by saying, “We make a big profit on every sale but we don’t sell much”. In order to overcome this drawback, the net barter terms of trade are weighted by the volume of exports. This has led to the development of another concept of terms of trade known as the income terms of trade which shall be explained later. Even so, the net barter terms of trade is most widely used concept to measure the power of the exports of a country to buy imports.

## **2. GROSS BARTER TERMS OF TRADE:**

This concept of the gross terms of trade was introduced by F.W. Taussig and in his view this is an improvement over the concept of net barter terms of trade as it directly takes into account the volume of trade. Accordingly, the gross barter terms of trade refer to the relation of the volume of imports to the volume of exports. Thus,

$$T_g = Q_m / Q_x$$

Where

$T_g$  = gross barter terms of trade,  $Q_m$  = quantity of imports

$Q_x$  = quantity of exports

To compare the change in the trade situation over a period of time, the following ratio is employed:

$$Q_{m1}/Q_{x1} : Q_{m0}/Q_{x0}$$

Where the subscript 0 denotes the base year and the subscript I denotes the current year.

It is obvious that the gross barter terms of trade for a country will rise (i.e., will improve) if more imports can be obtained for a given volume of exports. It is important to note that when the balance of trade is in equilibrium (that is, when value of exports is equal to the value of imports), the gross barter terms of trade amount to the same thing as net barter terms of trade.

This can be shown as under:

Value of imports = price of imports x quantity of imports =  $P_m \cdot Q_m$

Value of exports = Price of exports x quantity of exports =  $P_x \cdot Q_x$

Therefore, when balance of trade is in equilibrium.

$$P_x \cdot Q_x = P_m \cdot Q_m$$

$$P_x \cdot Q_m = P_m \cdot Q_x$$

However, when balance of trade is not in equilibrium, the gross barter terms of trade would differ from net barter terms of trade.

### **3. INCOME TERMS OF TRADE:**

In order to improve upon the net barter terms of trade G.S. Dorrance developed the concept of income terms of trade which is obtained by weighting net barter terms of trade by the volume of exports. Income terms of trade therefore refer to the index of the value of exports divided by the price of imports. Symbolically, income terms of trade can be written as

$$T_y = P_x \cdot Q_x / P_m$$

Where

$T_y$  = Income terms of trade

$P_x$  = Price of exports

$Q_x$  = Volume of exports

$P_m$  = Price of imports

Income terms of trade yields a better index of the capacity to import of a country and is, indeed, sometimes called 'capacity to import. This is because



in the long run balance of payments must be in equilibrium the value of exports would be equal to the value of imports.

Thus, in the long run:

$$P_m, Q_m = P_x, Q_x$$

$$Q_m = P_x \cdot Q_x / P_m$$

It follows from above that the volume of imports ( $Q_m$ ) which a country can buy (that is, capacity to import) depends upon the income terms of trade i.e.,  $P_x \cdot Q_x / P_m$ . Since income terms of trade is a better indicator of the capacity to import and since the developing countries are unable to change  $P_x$  and  $P_m$ . Kindleberger thinks it to be superior to the net barter terms of trade for these countries, However, it may be mentioned once again that it is the concept of net barter terms of trade that is usually employed.

#### **4. SINGLE FACTORAL TERMS OF TRADE:**

The concept of terms of trade does not take account of productivity changes in export industries. Prof. Viner had developed the concept of single factorial terms of trade which allows changes in the domestic export sector. It is calculated by multiplying the commodity terms of trade index by an index of productivity changes in domestic export industries. It can be expressed as:

$$T_s = T_c \cdot F_x = P_x \cdot F_x / P_m \quad (T_c = P_x / P_m)$$

Where  $T_s$  is the single factorial terms of trade,  $T_c$  is the commodity terms of trade and  $F_x$  is the productivity index of export industries. It shows that a country factorial terms of trade improve as productivity improves in its export industries. If the productivity of a country export industries increases, its factorial terms of trade may improve even though its commodity terms of trade may deteriorate.

#### **Limitations:**

This index is not free from certain limitations. It is difficult to obtain the necessary data to compute a productivity index. Further single factorial terms of trade do not take into account the potential domestic cost of production of imports industries in the other country.

## 5. DOUBLE FACTORAL TERMS OF TRADE:

The double factorial terms of trade take into account productivity changes both in the domestic export sector and the foreign export sector producing the country imports. The index measuring the double factorial terms of trade can be expressed as

$$Td = Tc \cdot \frac{Fx}{Fm} = \frac{Px}{Fm} \cdot \frac{Fx}{Fm} \quad \left( Tc = \frac{Px}{Pm} \right)$$

Where Td is the double factorial terms of trade, Px/Pm is the commodity terms of trade, Fx is the export productivity index, and Fm is the import productivity index.

It helps in measuring the change in the rate of exchange of a country as a result of the change in the productive efficiency of domestic factors manufacturing exports and that of foreign factors manufacturing imports for that country.

### Limitations:

Single factorial terms of trade is a much more relevant concept than the double factorial. We are interested in what our factor can earn in goods, not what factor services can command in the services of foreign factors. Related to productivity abroad moreover, is a question of the quality of the goods imported.

## 6. REAL COST TERMS OF TRADE:

Viner has also developed a terms of trade index to measure the real gain from international trade. He calls it the real cost terms of trade index. This index is calculated by multiplying the single factorial terms of trade with the reciprocal of an index of the amount of disutility per unit of productive resources used in producing export commodities. It can be expressed as:

$$Tr = Ts \cdot Rx = \frac{Px}{Pm} \cdot \frac{Fx}{Rx} \quad (Ts = \frac{Px}{Pm} \cdot \frac{Fx}{Rx})$$

Where Tr is the real cost terms of trade. Ts is the single factorial terms of trade and Rx is the index of the amount of disutility per unit of productive resources used in producing export commodities.

### Limitations:

A favourable real cost terms of trade index shows that the amount of imports received is greater in terms of the real cost involved in producing export commodities. But this index fails to measure the real cost involved in

the form of goods produced for export which could be used for domestic consumption to pay for imports. To overcome this problem, Viner develops the index of utility terms of trade.

### **7. UTILITY TERMS OF TRADE:**

The utility terms of trade index measures changes in the disutility of producing a unit of exports and changes in the relative satisfactions yielded by imports and the domestic products foregone to produced exports. The utility terms of trade index is calculated by multiplying the real cost terms of trade index with an index of the relative average utility of imports and domestic commodities foregone. Thus the utility terms of trade index can be expressed as:

$$T_u = T_r \cdot u = P_x / P_m \cdot F_x \cdot R_x \cdot u$$

Since the real terms of trade index and utility terms of trade index involve the measurement of disutility.

### **Limitations:**

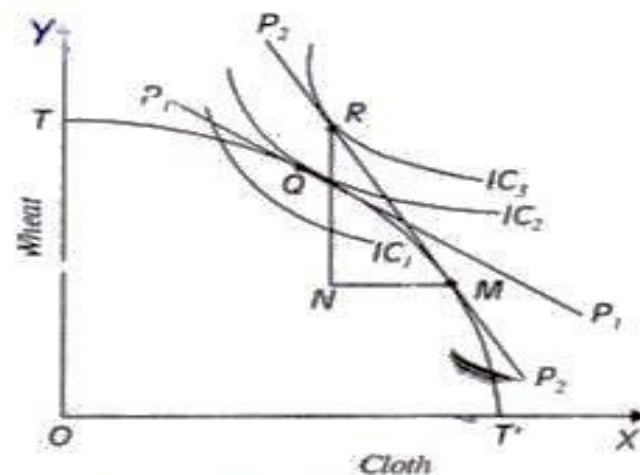
The single and double factorial terms of trade concepts, the concepts of real and utility terms of trade are of little practical use. That is why the concepts of the commodity terms of trade and income terms of trade have been used in measuring the gains from international trade in developed as well as developing countries.

### **3.3. DETERMINATION OF TERMS OF TRADE AND OFFER CURVE:**

The share of a country from the gain in international trade depends on the terms of trade. The terms of trade at which the foreign trade would take place is determined by reciprocal demand of each country for the product of the other countries. The theory of reciprocal demand has been explained graphically with the help of the concept of offer curves developed by Edgeworth and Marshall. The offer curve of a country shows the amounts of a commodity it offers at various prices for a given quantity of the commodity produced by the other country. To understand how offer curves are derived and how with their help determination of the terms of trade is explained, we shall first explain how a country reaches its equilibrium position about the amounts of goods to be produced and consumed.

For this purpose, modern economists usually employ the tools of production possibility curve and the community indifference curves. The production possibility curve represents the combinations of two commodities which a country, given its resources and technology, can produce.

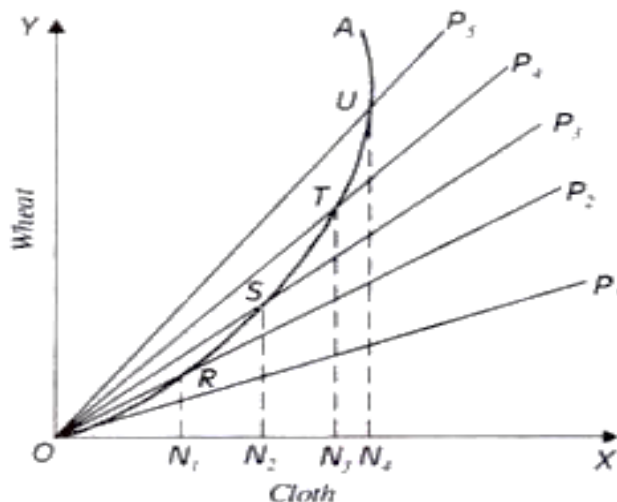
A community indifference curve shows the combinations of two goods which provide same satisfaction to the community as a whole. A map of community indifference curves portrays the tastes and demand pattern of a community for the two goods. A production possibility curve  $TT'$  and a set of community indifference curves  $IC_1, IC_2$  and  $IC_3$  of country A have been drawn in Fig. 3.1. The country reaches its equilibrium position with regard to production and consumption of cloth and wheat at the point Q where the production possibility curve  $TT'$  is tangent to the highest possible indifference curve  $IC_2$  at which marginal rate of transformation of cloth for wheat ( $MRT_{CW}$ ) equals marginal rate of substitution of cloth for wheat ( $MRS_{CW}$ ) as well as the price ratio of the two commodities  $P_c/P_w$  as shown by the slope of the price line  $P_1P_1$ .



**Fig.3.1 production and consumption of country A in the absence of trade**

Thus, tangency point Q in Fig. 3.1 depicts the equilibrium position of country in the absence of trade. Suppose country A enters into trade relation with country B and price of cloth rises relative to wheat so that new price-ratio line becomes  $P_2P_2$ . It will be observed from Fig. 3.1 that with price-ratio line  $P_2P_2$  production equilibrium of country is at point M, its consumption

equilibrium is at point R. This shows that with price-ratio line  $PP_2$  country A will offer or export MN of cloth for RN imports of wheat.

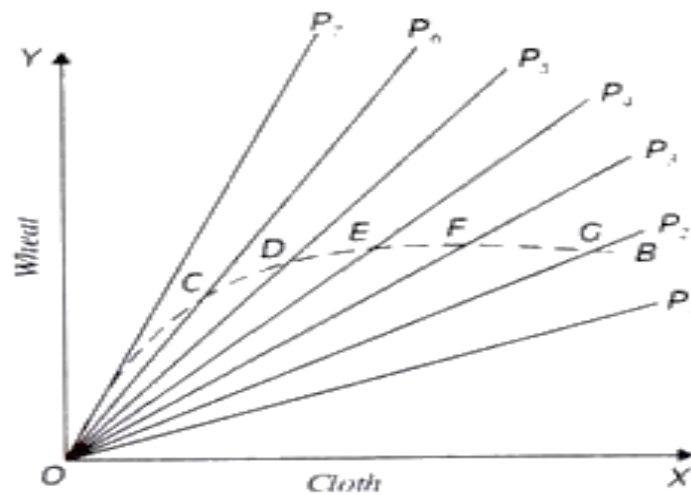


**Fig.3.2 Offer curve of country A**

Similarly, if price of cloth further rises relative to wheat, price-ratio line will become more steep, then for the same quantity offered of export of cloth, the or import of wheat will increase. We can derive offer curve of country A in Fig. 3.2. The tangent line in Figure shows the domestic price ratio of the two commodities and has a negative slope. In the analysis of the offer curve, the price line is drawn with a positive slope from the origin. This is because in the drawing of an offer curve we are interested only in knowing the quantity of one commodity which can be exchanged for a certain quantity of another commodity.

In other words, in the analysis of terms of trade what we are really interested is the absolute slope of the curve, i.e., the price ratio. In Fig. 3.2 the positively sloping price line  $OP_1$  from the origin, which in absolute terms, has the same slope as  $P_1P_1$ . In Fig. 3.2 at price ratio line  $O_1P_1$  no trade occurs. When price of cloth rises and price ratio line shifts to  $OP_2$  as will be from Fig. 3.2, country A offers  $ON_1$  of cloth (exports) for  $RN_1$  of wheat (imports). (Note that at a given price ratio how much quantity of a commodity, a country will offer for imports from the other country is determined by production possibility curve and community's indifference curves as illustrated in Fig. 3.1). Suppose the price of cloth further rises relatively to that of wheat causing the price line to shift to the position  $OP_3$ . It will be seen that with the price line  $OP_3$ , country A is willing to offer for export  $ON_2$  quantity of cloth for  $SN_2$  of

wheat. Likewise, Fig. 3.2 portrays the exports and imports of the country A as price of cloth in terms of wheat increases further and consequently price line shifts further above to  $OP_4$  and  $OP$  and the new offers of export of cloth for import of wheat are determined by equilibrium points T and U. If points such as R, S, T and U representing the country A's offers of cloth for wheat are joined we get its offer curve.



**Figure 3.3 Offer curve of country B**

It is important to note that the offer curve may be regarded as the supply curve in the international trade as it shows amounts of cloth which the country A is willing to offer for certain amounts of imports of wheat at various price ratios. Another important point to be noted is that the offer curve cannot go below the price line  $OP$ , which represents the domestic exchange ratio determined by the tangency point  $Q$  of production possibility curve and community indifference curve of country A as shown in Fig. 3.1. This is because, as stated above, no country will be willing to export its product for the quantity of the imported product which is smaller than that it can produce at home. Likewise, we can derive the offer curve of country B. Figure 3.3 portrays the derivation of the offer curve of country B. representing quantities of wheat which it is willing to exchange for certain quantities of cloth from country A at various prices. Note that so long as country B is importing a smaller quantity of cloth, it will be willing to offer relatively more wheat for cloth. But as the quantity of imported cloth is increased, it would be prepared to offer relatively less wheat for the given quantity of imports of cloth.

In Fig. 3.3, Y-axis represents wheat, the origin for indifference curves of country B will be the North-West Corner Price lines.  $OP_7, OP_6, OP_5, OP_4$  etc., express successively higher price ratios of wheat for cloth. Price line  $OP_1$  represents the domestic price ratio in country B in the absence of trade. The points C, D, E, F, G which has been obtained from the equilibrium or tangency points between the community indifference curves of country B and the various price-ratio lines show the equilibrium offers of wheat by country B for cloth of country A at various prices. By joining together points, C, D, E, F and G we obtain the offer curve of country B indicating its demand for cloth of country A in terms of its own product wheat. It would be observed from Fig. 3.2 and 3.3 that offer curves OA and OB of the two countries have been drawn with the same origin O (i.e., South-West Corner) as the basis. These offer curves represent reciprocal demand of the two countries for each other's product in terms of their own product.

### **DETERMINANTS OF TERMS OF TRADE**

Some of the major factors affecting the terms of trade are as follows: The terms of trade of a country are influenced by a number of factors which are discussed as under:

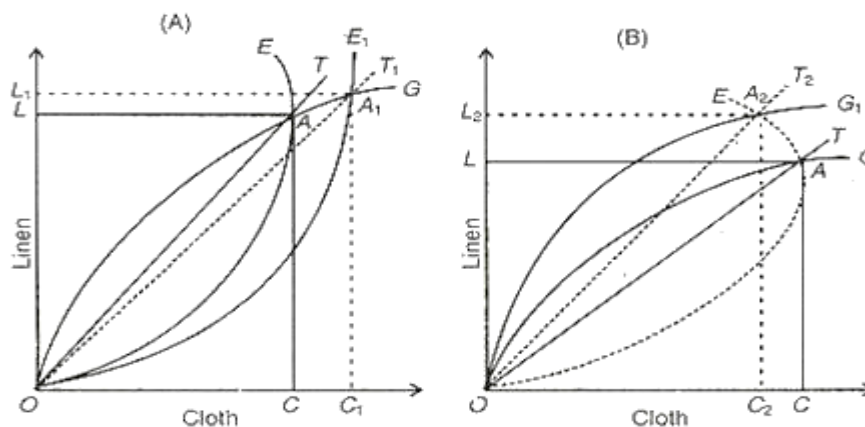
#### **1. Reciprocal Demand:**

The terms of trade of a country depend upon reciprocal demand, i.e. "the strength and elasticity of each country's demand for the other country's product". Suppose there are two countries, Germany and England, which produce linen and cloth respectively.

If Germany's demand for England's cloth becomes more intense (inelastic), the price of cloth rises more than the price of linen, the commodity terms of trade will move against Germany and in favour of England. On the other hand, if England's demand for Germany's linen becomes more intense, the price of linen will rise more than the price of cloth, and the commodity terms of trade will move in favour of Germany and against England. This is explained diagrammatically in Fig. 3.4 (A) and (B) where England's offer curve and OG is the offer curve of Germany. The point A where the two offer curves intersect each other is the equilibrium point at which OC of cloth is traded by

England for OL linen of Germany. The terms of trade are represented by the slope of the ray OT.

Suppose England's demand for Germany's linen increases. England will be prepared to sell more cloth for Germany's linen. The increase in England's demand is shown by the shifting of its offer curve to the right as OE<sub>1</sub> which intersects Germany's offer curve OG at A, in Panel (A).



**Fig 3.4**

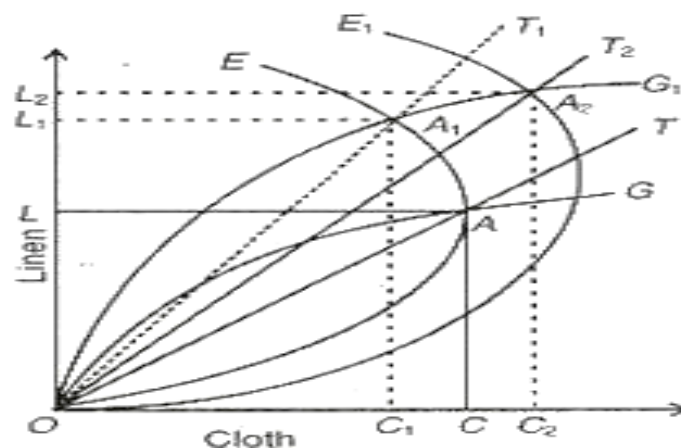
Now the new terms of trade are represented by the ray OT<sub>1</sub> whereby England exports OC<sub>1</sub> units of cloth for OL<sub>1</sub> units of linen. The terms of trade have deteriorated for England and improved for Germany. This is evident from the fact that England exports CC, more units of cloth in exchange for LL, units of linen. CC, is greater than LL<sub>1</sub>.

Similarly, in Panel (B), if Germany's demand for England's cloth increases, Germany's offer curve shifts to the left as OG, which intersects England's initial offer curve OE at A<sub>2</sub>. Now Germany exports OL<sub>2</sub> units of linen for OC<sub>2</sub> units of cloth. The new terms of trade, as shown by the slope of ray OT<sub>2</sub> indicate that they have deteriorated for Germany and improved for England. This is evident from the fact that Germany exports LL, more linen in exchange for CC<sub>2</sub> less cloth.

But the terms of trade will depend upon the elasticity of demand of the offer curve of each country. The more inelastic the offer curve of a country, the more unfavourable are the terms of trade for it in relation to the other country. On the contrary, the more elastic its offer curve, the more favourable are its terms of trade in relation to the other country. This is illustrated in Fig. 3.5 where the initial equilibrium terms of trade are represented by OT with



OE and OG curves intersecting at point A. England trades OC of cloth with OL of linen of Germany. When the OG curve of Germany shifts to  $OG_1$ , it cuts the OE curve of England at  $A_1$  and the terms of trade line is  $OT_1$ . Germany's offer curve  $OG_1$  being inelastic in relation to England's offer curve OE, Germany's demand for English cloth is more intense than before. Now Germany offers more linen  $LL_1$  against less cloth  $CC_1$  of England than at the OT line. Thus the terms of trade are unfavourable for Germany and favourable for England.

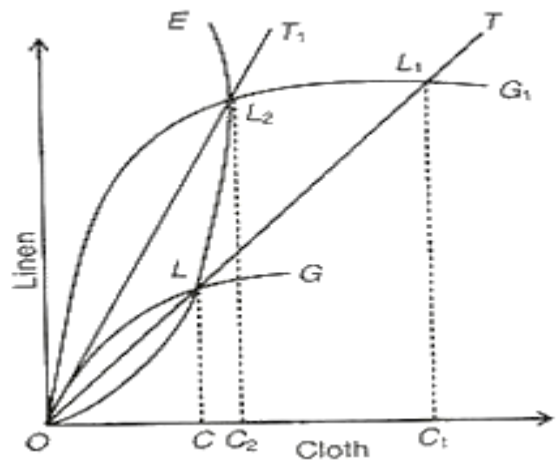


**Fig 3.5**

Now suppose the offer curve of England shifts from OE to  $OE_1$ , and cuts the OG curve of Germany at  $A_2$ . The terms of trade are set at  $OT_2$  line. In this case, England's offer curve  $OE_1$  being more inelastic in relation to Germany's offer curve OG, England's demand for German linen is more intense. Therefore, England offers more cloth  $C_1C_2$  and Germany offers less linen  $L_1L_2$  than at the  $OT_1$  line. This shows that the terms of trade have worsened for England and improved for Germany.

## 2. Changes in Factor Endowments:

Changes in factor endowments of a country affect its terms of trade. Changes in factor endowments may increase exports or reduce them. With tastes remaining unchanged, they may lead to changes in the terms of trade. This is explained with the help of Fig. 3.6 where OE is the offer curve of England and OG is the offer curve of Germany. Before any change in factor endowments, the terms of trade of England and Germany are settled at point L where they trade OC of cloth for CL of linen. Suppose there is an increase in the supply of Germany's factors of production. As a result, the new offer

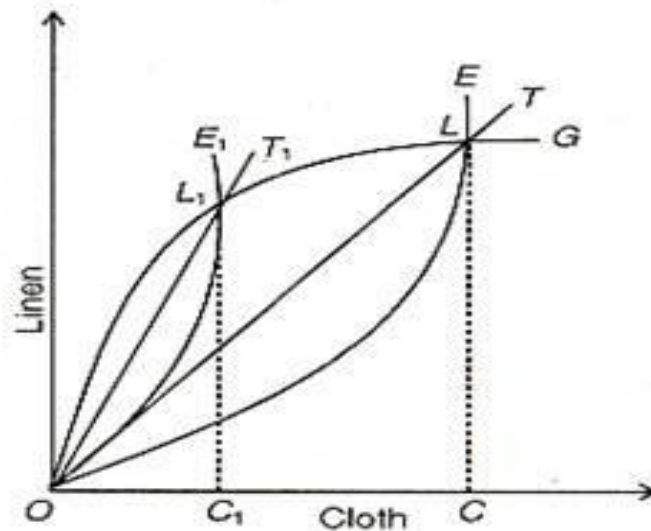


**Fig.3.6**

Curve of Germany is  $OG_1$ . At the old terms of trade  $OT$ , Germany would be at point  $L$ , where it would export more linen  $C_1L_1$  and import English cloth  $OC_1$ . But England may not be willing to trade with Germany at the old terms of trade because of its inability to produce so much cloth as its factor endowments and tastes remain unchanged. Thus the terms of trade will settle on the new terms of trade line  $OT_1$  where England's offer curve  $OE$  intersects Germany's new offer curve  $OG$ , at point  $L_T$  at  $L_2$ , Germany exports  $C_2L_2$  of linen in exchange for  $OC_2$  of cloth from England. Thus the terms of trade have moved against Germany from  $L$  to  $L_2$ , with change in its factor endowments because it exports more linen ( $C_2L_2$ ) than before ( $CL$ ).

**3. Changes in Technology:**

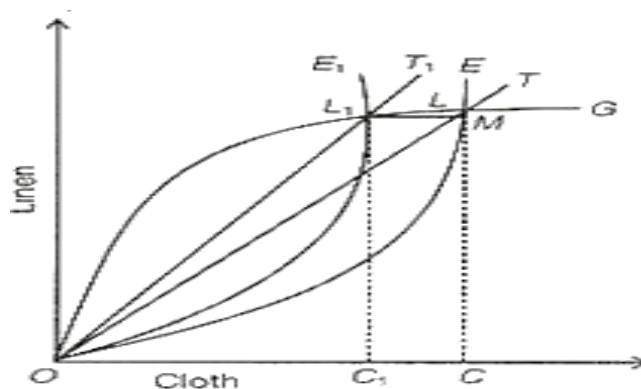
Technological changes also affect the terms of trade of a country. The effect of technological change on terms of trade is illustrated in Fig. 3.7. Suppose there is change in technology in Germany. Before technological change the terms of trade between Germany and England are settled at point  $L$  on the  $OT$  ray where Germany exports  $CL$  of linen for  $OC$  of England cloth. With technological change, Germany's new offer curve is  $OG$ , which cuts the terms of trade line  $OT$  at  $L_1$ . At this point, Germany would like to export less linen ( $C_1L_1$ ) and import less cloth ( $OC_1$ ) than England wants to exchange at the terms of trade  $OT$ . So Germany's terms of trade improve when its new offer curve  $OG$ , intersects England's unchanged offer curve  $OE$  at  $L$ , where the new terms of trade are settled on the line  $OT_1$ . At  $L_2$ , Germany is better off because it exports less linen for more of England's cloth, i.e.  $C_2L_2 < OC_2$ . Its terms of trade have improved with technological change.



**Fig. 3.7.**

**4. Changes in Tastes:**

Changes in tastes of the people of a country also influence its terms of trade with another country. Suppose England's tastes shift from Germany's linen to its own cloth. In this situation, England would export less cloth to Germany and its demand for Germany's linen would also fall. Thus England's terms of trade would improve. On the contrary, a change in England's taste for Germany's linen would increase its demand and hence the terms of trade would deteriorate for England. The first case of an improvement in the terms of trade of England is depicted in Fig. 3.8. When England's tastes change from Germany's linen to its own cloth, its offer curve shifts up to  $OE_1$  and intersect Germany's unchanged offer curve  $OG$  at  $L_1$ . As a result, England exports only  $OC_1$  of cloth in exchange for  $C_1L_1$  of Germany's linen. Obviously, England's

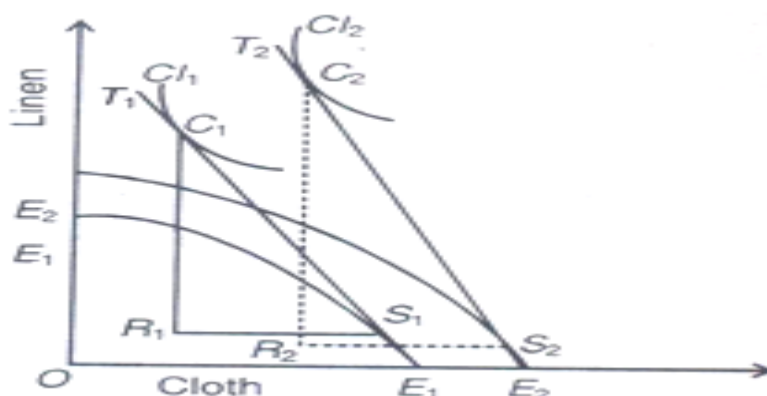


**Fig.3.8.**

Terms of trade have improved for now it exchanges less cloth ( $OC_1$ ) for more linen of Germany ( $C_1L_1$ ) i.e.  $OC_1 < C_1L_1$ .

## 5. Economic Growth:

Economic growth is another important factor which affects the terms of trade. The raising of a country's national product or income over time is called economic growth. Given the tastes and technology in a country, an increase in its productive capacity may affect favourably or adversely its terms of trade. This is illustrated in Fig. 3.9 in terms of the production possibility curves and the community indifference curves of a country which experience economic growth.  $E_1E_1$  is the production possibility curve of England before growth where the slope of  $T_1$  shows its terms of trade.  $E_2E_2$  is the production possibility curve of England after growth where the slope of  $T_2$  shows its terms of trade.



**Fig.3.9.**

Before growth, it is producing at  $S_1$ , and consuming at  $C_1$ , on the community indifference curve  $C_1$ . Thus England is exporting  $R_1S_1$  of cloth and importing  $R_1C_1$  of linen for Germany. When growth takes place, the production possibility curves  $E_2E_2$ , shifts outward as  $E_2E_2$ . The new terms of trade after growth, as represented by the slope of the line  $T_2$ , show an improvement when production takes place at point  $S_2$  on the production possibility curve  $E_2E_1$  and consumption at point  $C_2$ , of the community indifference curve  $C_2$ . As a result of the improvement in England's terms of trade, it exports less cloth to Germany in exchange for more linen than in the pre-growth situation. It exports  $R_2S_2$ , which is less than  $R_1S_1$  and imports  $R_2C_2$ , which is greater than  $R_1C_1$ .

## 6. Tariff:

An import tariff improves the terms of trade of the imposing country. This is explained with the help of Fig. 3.10 where the offer curves of England and Germany before the imposition of tariff are  $OE$  and  $OG$  respectively. The initial terms of trade are given by the line  $OT$ . England is exporting  $OC$  of cloth

and importing CL of linen from Germany. Suppose a tariff is imposed on Germany's linen by England. It shifts the offer curve of England from OE to OE<sub>1</sub>. These changes the terms of trade OT to OT<sub>1</sub> in favour of England. Now England exports OC, of cloth in exchange for C<sub>1</sub>L<sub>1</sub> of linen from Germany. It now exports CC<sub>1</sub> = (ML<sub>1</sub>) less of cloth than before and imports ML less of linen. Since the quantity of exports reduced as a result of tariff by England is greater than the quantity of imports reduced by Germany (ML<sub>1</sub> < ML), the terms of trade have definitely moved in favour of England.

### **7. Devaluation:**

Devaluation raises the domestic price of imports and reduces the foreign price of exports of a country devaluing its currency in relation to the currency of another country.

The effects of devaluation on the terms of trade have been much debated among economists. According to Prof. Machlup, "Devaluation is supposed to improve the balance of trade. A reduction in the physical volume of imports in relation to the physical volume of exports constitutes an adverse change in the gross barter terms of trade."

Thus devaluation will be successful only if the gross barter term becomes adverse. Prof. Robertson favours the use of the concept of the commodity terms of trade to assess the effects of devaluation. To him, if this concept is used, devaluation will lead to rise in the prices of imports and fall in the prices of exports in foreign currency, and hence deteriorate the commodity terms of trade. But Prof. Hirsch suggests that the right procedure should be to study price movements in exports and imports in the same currency in order to assess the true effects of devaluation. Both exports and imports prices normally rise in the home currency and fall in the foreign currency.

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**UNIT IV**  
**BALANCE OF TRADE AND BALANCE OF PAYMENT**

**4.1. INTRODUCTION**

**4.1.1. BALANCE OF TRADE**

The difference in value over a period of time between a country's imports and exports of goods and services, usually expressed in the unit of currency of a particular country or economic union (e.g., dollars for the United States, pounds sterling for the United Kingdom, or euros for the European Union). The balance of trade is part of a larger economic unit.

**4.1.2. BALANCE OF PAYMENTS** (the sum total of all economic transactions between one country and its trading partners around the world), which includes capital movements (money flowing to a country paying high interest rates of return), loan repayment, expenditures by tourists, freight and insurance charges, and other payments.....)

If the exports of a country exceed its imports, the country is said to have a favourable balance of trade, or a trade surplus. Conversely, if the imports exceed exports, an unfavourable balance of trade, or a trade deficit, exists. According to the economic theory of mercantilism, which prevailed in Europe from the 16th to the 18th century, a favourable balance of trade was a necessary means of financing a country's purchase of foreign goods and maintaining its export trade. This was to be achieved by establishing colonies that would buy the products of the mother country and would export raw materials (particularly precious metals), which were considered an indispensable source of a country's wealth and power.... The assumptions of mercantilism were challenged by the classical economic theory of the late 18th century, when philosophers and economists such as Adam Smith argued that free trade is more beneficial than the protectionist tendencies of mercantilism and that a country need not maintain an even exchange or, for that matter, build a surplus in its balance of trade (or in its balance of payments).

## **4.2. MEANING**

The balance of payments of a country is a systematic record of all its economic transactions with the outside world in a given year. It is a statistical record of the character and dimensions of the country's economic relationships with the rest of the world. According to Sodersten, The balance of payments is merely a way of listing receipts and payments in international transactions for a country. B. J. Cohen says, "It shows the country's trading position, changes in its net position as foreign lender or borrower, and changes in its official reserve holding."

## **4.3. DIFFERENCE BETWEEN BALANCE OF TRADE AND BALANCE OF PAYMENT**

The BOP of a country is a systematic record of all economic transactions between the residents of the home country and the residents of the rest of the world during a given year. By all transactions we mean exports and imports of both goods and services, unrequited transfers as well as capital movements. Thus, the BOP of a country is a complete picture of its international transactions. On the other hand, the 'balance of trade' (henceforth, BOT) is the difference between visible exports and visible imports. This difference is also called merchandise balance or balance of visible trade. Similarly, one obtains the balance of invisible trade which represents the difference between invisible exports and invisible imports.

The difference between a nation's exports of goods and services and its imports is called balance of trade in goods and services or 'balance of trade.' Whether invisibles are included or not in the balance of trade, it is clear that the balance of payment is a broader concept than balance of trade. Balance of trade is classified into balance of visible and invisible trade. The balance of trade is said to improve when exports of visible items (and invisible items) rise more than or fall less than imports of visible items (and invisible items). Conversely, the trade balance deteriorates. A country's balance of payment to be is and favourable if its total receipts exceed total payments. An important point to note is that there may be a balance of trade deficit but a balance of payment surplus, or vice versa. In other words, a trade deficit does not

necessarily imply that a country is losing its foreign reserves— the difference is accounted by long term capital movements.

#### **4.4. STRUCTURE OF BALANCE OF PAYMENT:**

The balance of payments account of a country is constructed on the principle of double-entry bookkeeping. Each transaction is entered on the credit and debit side of the balance sheet. But balance of payments accounting differs from business accounting in one respect. In business accounting, debits (-) are shown on the left side and credits (+) on the right side of the balance sheet. But in balance of payments accounting, the practice is to show credits on the left side and debits on the right side of the balance sheet.

When a payment is received from a foreign country, it is a credit transaction while payment to a foreign country is a debit transaction. The principal items shown on the credit side (+) are exports of goods and services, unrequited (or transfer) receipts in the form of gifts, grants, etc. from foreigners, borrowings from abroad, investments by foreigners in the country, and official sale of reserve assets including gold to foreign countries and international agencies. The principal items on the Debit side (-) include imports of goods and services, transfer (or unrequited) payments to foreigners as gifts, grants, etc., lending to foreign countries, investments by residents to foreign countries, and official purchase of reserve assets or gold from foreign countries and international agencies. These credit and debit items are shown vertically in the balance of payments account of a country according to the principle of double-entry book-keeping.

#### **Horizontally, they are divided into three categories:**

The current account, the capital account, and the official settlements account or the Official reserve assets account.

The balance of payments account of a country is constructed in Table 3.1.



**Table 1. Balance of Payments Account**

<i>Credits (+)</i> <i>(Receipts)</i>		<i>Debits (-)</i> <i>(Payments)</i>
	<i>1. Current Account</i>	
<i>Exports</i>		<i>Imports</i>
(a) Goods		(a) Goods
(b) Services		(b) Services
(c) Transfer Payments		(c) Transfer Payments
	<i>2. Capital Account</i>	
(a) Borrowings from Foreign Countries		(a) Lending to Foreign Countries
(b) Direct Investments by Foreign Countries		(b) Direct Investments in Foreign Countries
	<i>3. Official Settlements Account</i>	
(a) Increase in Foreign Official Holdings		(a) Increase in Official Reserve of Gold and Foreign Currencies
	<i>Errors and Omissions</i>	

### **1. Current Accounting:**

The current account of a country consists of all transactions relating to trade in goods and services and unilateral (or unrequited) transfers. Service transactions include costs of travel and transportation, insurance, income and payments of foreign investments, etc. Transfer payments relate to gifts, foreign aid, pensions, and private remittances, charitable donations etc. received from foreign individuals and governments to foreigners.

In the current account, merchandise exports and imports are the most important items. Exports are shown as a positive item and are calculated f.o.b. (free on board) which means that costs of transportation, insurance, etc are excluded. On the other side, imports are shown as a negative item and are calculated c.i.f. which means that costs, insurance and freight are included. The difference between exports and imports of a country is its balance of visible trade or merchandise trade or simply balance of trade. If visible exports exceed visible imports, the balance of trade is favourable. In the opposite case when imports exceed exports, it is unfavourable. It is, however, services and transfer payments or invisible items of the current account that reflect the true picture of the balance of payments account. The balance of exports and

imports of services and transfer payments is called the balance of invisible trade. The invisible items along with the visible items determine the actual current account position. If exports of goods and services exceed imports of goods and services, the balance of payments is said to be favourable. In the opposite case, it is unfavourable.

In the current account, the exports of goods and services and the receipts of transfer payments (unrequited receipts) are entered as credits (+) because they represent receipts from foreigners. On the other hand, the imports of goods and services and grant of transfer payments to foreigners are entered as debits (-) because they represent payments to foreigners. The net value of these visible and invisible trade balances is the balance on current account.

## **2. Capital Account:**

The capital account of a country consists of its transactions in financial assets in the form of short-term and long-term lending's and borrowings, and private and official investments. In other words, the capital account shows international flow of loans and investments, and represents a change in the country's foreign assets and liabilities. Long-term capital transactions relate to international capital movements with maturity of one year or more and include direct investments like building of a foreign plant, portfolio investment like the purchase of foreign bonds and stocks, and international loans. On the other hand, short-term international capital transactions are for a period ranging between three months and less than one year.

There are two types of transactions in the capital account—private and government. Private transactions include all types of investment: direct, portfolio and short-term. Government transactions consist of loans to and from foreign official agencies. In the capital account, borrowings from foreign countries and direct investment by foreign countries represent capital inflows. They are positive items or credits because these are receipts from foreigners. On the other hand, lending to foreign countries and direct investments in foreign countries represent capital outflows. They are negative items or debits because they are payments to foreigners. The net value of the balances of

short-term and long-term direct and portfolio investments is the balance on capital account.

### **3. The Official Settlements Account:**

The official settlements account or official reserve assets account is, in fact, a part of the capital account. But the U.K. and U.S. balance of payments accounts show it as a separate account. "The official settlements account measures the change in nation's liquidity and non-liquid liabilities to foreign official holders and the change in a nation's official reserve assets during the year. The official reserve assets of a country include its gold stock, holdings of its convertible foreign currencies and SDRs, and its net position in the IMF." It shows transactions in a country's net official reserve assets.

### **Errors and Omissions:**

Errors and omissions is a balancing item so that total credits and debits of the three accounts must equal in accordance with the principles of double entry book-keeping so that the balance of payments of a country always balances in the accounting sense.

### **3. Is Balance of Payments Always in Equilibrium?**

Balance of payments always balances means that the algebraic sum of the net credit and debit balances of current account, capital account and official settlements account must equal zero. Balance of payments is written as.

$$B = R_f - P_f$$

B = where, B represents balance of payments,

$R_f$  receipts from foreigners,

$P_f$  payments made to foreigners.

When  $B = R_f - P_f = 0$ , the balance of payments is in equilibrium.

When  $R_f - P_f > 0$ , it implies receipts from foreigners exceed payments made to foreigners and there is surplus in the balance of payments. On the other hand, when  $R_f - P_f < 0$  or  $R_f < P_f$  - there is deficit in the balance of payments as the payments made to foreigners exceed receipts from foreigners.

If net foreign lending and investment abroad are taken, a flexible exchange rate creates an excess of exports over imports. The domestic currency depreciates in terms of other currencies.

**The export becomes cheaper relatively to imports. It can be shown in equation form:**

$$X + B = M + I_f$$

Where X represents exports, M imports,  $I_f$  foreign investment, B foreign borrowing

$$\text{Or } X - M = I_f - B$$

$$\text{Or } (X - M) - (I_f - B) = 0$$

The equation shows the balance of payments in equilibrium. Any positive balance in its current account is exactly offset by negative balance on its capital account and vice versa. In the accounting sense, the balance of payments always balances. This can be shown with the help of the following equation:

$$C + S + T = C + I + G + (X - M)$$

$$\text{or } Y = C + I + G + (X - M) \quad [ \because Y = C + S + T ]$$

Where C represents consumption expenditure, S domestic saving, T tax receipts, I investment expenditures, G government expenditures, X exports of goods and services, and M imports of goods and services.

In the above equation

$C + S + T$  is GNI or national income (Y), and

$C + I + G = A$ ,

Where A is called 'absorption'.

In the accounting sense, total domestic expenditures ( $C + I + G$ ) must equal current income ( $C + S + T$ ) that is  $A = Y$ . Moreover, domestic saving ( $S_d$ ) must equal domestic investment ( $I_d$ ). Similarly, an export surplus on current account ( $X > M$ ) must be offset by an excess of domestic savings over investment ( $S_d > I_d$ ). Thus the balance of payments always balances in the accounting sense, according to the basic principle of accounting.

In the accounting system, the inflow and outflow of a transaction are recorded on the credit and debit sides respectively. Therefore, credit and debit sides always balance. If there is a deficit in the current account, it is offset by a matching surplus in the capital account by borrowings from abroad or/and withdrawing out of its gold and foreign exchange reserves, and vice versa. Thus, the balance of payments always balances in this sense also.

## **4.5. DISEQUILIBRIUM IN BALANCE OF PAYMENTS**

Disequilibrium in the BOP of a country may be either a deficit or a surplus. A deficit or surplus in BOP of a country appears when its autonomous receipts (credits) do not match its autonomous payments (debits). If autonomous credit receipts exceed autonomous debit payments, there is a surplus in the BOP and the disequilibrium is said to be favourable. On the other hand, if autonomous debit payments exceed autonomous credit receipts, there is a deficit in the BOP and the disequilibrium is said to be unfavourable or adverse.

### **4.5.1. CAUSES OF DISEQUILIBRIUM:**

There are many factors that may lead to a BOP deficit or surplus:

#### **1. Temporary Changes (or Disequilibrium):**

There may be a temporary disequilibrium caused by random variations in trade, seasonal fluctuations, the effects of weather on agricultural production, etc. Deficits or surpluses arising from such temporary causes are expected to correct themselves within a short time.

#### **2. Fundamental Disequilibrium:**

Fundamental disequilibrium refers to a persistent and long-run BOP disequilibrium of a country. It is a chronic BOP deficit, according to IMF.

It is caused by such dynamic factors as: (1) Changes in consumer tastes within the country or abroad which reduce the country's exports and increase its imports. (2) Continuous fall in the country's foreign exchange reserves due to supply inelasticity's of exports and excessive demand for foreign goods and services. (3) Excessive capital outflows due to massive imports of capital goods, raw materials, essential consumer goods, technology and external indebtedness. (4) Low competitive strength in world markets which adversely affects exports. (5) Inflationary pressures within the economy which make exports dearer.

#### **3. Structural Changes (or Disequilibrium):**

Structural changes bring about disequilibrium in BOP over the long run.

They may result from the following factors:

(a) Technological changes in methods of production of products in domestic industries or in the industries of other countries. They lead to changes in costs, prices and quality of products.

(b) Import restrictions of all kinds bring about disequilibrium in BOP.

(c) Deficit in balance of payment also arises when a country suffers from deficiency of resources which it is required to import from other countries.

(d) Disequilibrium in balance of payment may also be caused by changes in the supply or direction of long-term capital flows. More and regular flow of long-term capital may lead to BOP surplus, while an irregular and short supply of capital brings BOP deficit.

#### **4. Changes in Exchange Rates:**

Changes in foreign exchange rate in the form of overvaluation or undervaluation of foreign currency lead to BOP disequilibrium. When the value of currency is higher in relation to other currencies, it is said to be overvalued. Opposite is the case of an undervalued currency. Overvaluation of the domestic currency makes foreign goods cheaper and exports dearer in foreign countries. As a result, the country imports more and exports less of goods. There is also outflow of capital. This leads to unfavourable BOP. On the contrary, undervaluation of the currency makes BOP favourable for the country by encouraging exports and inflow of capital and reducing imports.

#### **5. Cyclical Fluctuations (or Disequilibrium):**

Cyclical fluctuations in business activity also lead to BOP disequilibrium. When there is depression in a country, volumes of both exports and imports fall drastically in relation to other countries. But the fall in exports may be more than that of imports due to decline in domestic production. Therefore, there is an adverse BOP situation. On the other hand, when there is boom in a country in relation to other countries, both exports and imports may increase. But there can be either a surplus or deficit in BOP situation depending upon whether the country exports more than imports or imports more than exports. In both the cases, there will be disequilibrium in BOP.

## **6. Changes in National Income:**

Another cause is the change in the country's national income. If the national income of a country increases, it will lead to an increase in imports thereby creating a deficit in its balance of payments, other things remaining the same. If the country is already at full employment level, an increase in income will lead to inflationary rise in prices which may increase its imports and thus bring disequilibrium in the balance of payments.

## **7. Price Changes:**

Inflation or deflation is another cause of disequilibrium in the balance of payments. If there is inflation in the country, prices of exports increase. As a result, exports fall. At the same time, the demand for imports increase. Thus increase in export prices leading to decline in exports and rise in imports results in adverse balance of payments.

## **8. Stage of Economic Development:**

A country's balance of payments also depends on its stage of economic development. If a country is developing, it will have a deficit in its balance of payments because it imports raw materials, machinery, capital equipment, and services associated with the development process and exports primary products. The country has to pay more for costly imports and gets less for its cheap exports. This leads to disequilibrium in its balance of payments.

## **9. Capital Movements:**

Borrowings and lending's or movements of capital by countries also result in disequilibrium in BOP. A country which gives loans and grants on a large scale to other countries has a deficit in its BOP on capital account. If it is also importing more, as is the case with the USA, it will have chronic deficit. On the other hand, a developing country borrowing large funds from other countries and international institutions may have a favourable BOP. But such a possibility is remote because these countries usually import huge quantities of food, raw materials, capital goods, etc. and export primary products. Such borrowings simply help in reducing BOP deficit.

## **10. Political Conditions:**

Political condition of a country is another cause of disequilibrium in BOP. Political instability in a country creates uncertainty among foreign

investors which leads to the outflow of capital and retards its inflow. This causes disequilibrium in BOP of the country. Disequilibrium in BOP also occurs in the event of war or fear of war with some other country.

#### **4.5.2. IMPLICATIONS OF DISEQUILIBRIUM:**

A disequilibrium in the balance of payments whether a deficit or surplus has important implications for a country. A deficit in the combined current and capital accounts is regarded as undesirable for the country. This is because such a deficit has to be covered by borrowing from abroad or attracting foreign exchange or capital from abroad. This may require paying high interest rates. There is also the danger of withdrawing money by foreigners, as happened in the case of the Asian crisis in the late 1990s. An alternative may be to draw on the reserves of the country which may also lead to a financial crisis. Moreover, the reserves of a country being limited, they can be used to pay for balance of payment deficit up to a limit. But the above analysis of a combined current and capital account deficit is not correct in practice. The reason being that a current account deficit is the same thing as a capital account surplus. However, it is beneficial for a country to have a current account deficit even if it equals capital account surplus in BOP.

In the short-run, the country may benefit from a higher level of consumption through import of goods and consequently a higher standard of living. But the excess of imports over exports may be financed by foreign investments in the country. These may lead to increased production, employment and income in the country. In the long-run, foreign investors may purchase large assets in the country and thus adversely affect domestic industry as is the case with MNCs (multinational corporations). The current account deficit in Balance of payment of a country may have either good or bad effects depending on the nature of an economy. Take a country where domestic industries are rapidly growing and it has current account BOP deficit. These industries offer a high rate of return on their investment. This would, in return, attract foreign investments. As a result, the country would have a capital account surplus due to the inflow of capital and a current account deficit.



This current account deficit is good for the economy. No doubt, the external debt of the country increases, but this debt is being utilised to finance the rapid growth of the economy. The real burden of this debt will be very low because it can be repaid out of higher income in the future.

On the contrary, a country having an inefficient and unproductive domestic industry will be adversely affected by its current account BOP deficit. The country borrows from abroad to finance the excess of spending over consumption. To attract foreign borrowings, the country will have to pay high interest rates. These will increase the money burden of the debt. The real burden of the debt will also increase because of the low productive capacity of domestic industries. If the current consumption is being financed by foreign borrowings, the wealth of the economy will decline. This, in turn, will lead to either a reduction in domestic expenditure or a change in government policy so as to control the rising debt.

On the other hand, if foreign borrowings are being used to finance real investment, the current account BOP deficit will be beneficial for the economy. A higher rate of return on real investment than the interest on foreign borrowings would increase the country's wealth over time through rise in its national income. Thus a current account BOP deficit is not always undesirable for a country.

#### **4.6. MEASURES TO CORRECT DEFICIT IN BALANCE OF PAYMENTS**

When there is a deficit in the balance of payments of a country, adjustment is brought about automatically through price and income changes or by adopting certain policy measures like export promotion, monetary and fiscal policies, devaluation and direct controls.

##### **1. Adjustment through Exchange Depreciation (Price Effect):**

Under flexible exchange rates, the disequilibrium in the balance of payments is automatically solved by the forces of demand and supply for foreign exchange. An exchange rate is the price of a currency which is determined, like any other commodity, by demand and supply. "The exchange rate varies with varying supply and demand conditions, but it is always possible to find an equilibrium exchange rate which clears the foreign exchange market and creates external equilibrium.' This is automatically

achieved by depreciation of a country's currency in case of deficit in its balance of payments.

Depreciation of a currency means that its relative value decreases. Depreciation has the effect of encouraging exports and discouraging imports. When exchange depreciation takes place, foreign prices are translated into domestic prices. Suppose the dollar depreciates in relation to the pound. It means that the price of dollar falls in relation to the pound in the foreign exchange market. This leads to the lowering of the prices of U.S. exports in Britain and raising of the prices of British imports in the U.S. When import prices are higher in the U.S., the Americans will purchase less goods from the Britishers. On the other hand, lower prices of U.S. exports will increase exports and diminish imports, thereby bringing equilibrium in the balance of payments.

### **2. Devaluation or Expenditure-Switching Policy:**

Devaluation raises the domestic price of imports and reduces the foreign price of exports of a country devaluing its currency in relation to the currency of another country. Devaluation is referred to as expenditure switching policy because it switches expenditure from imported to domestic goods and services. When a country devalues its currency, the price of foreign currency increases which makes imports dearer and exports cheaper. This causes expenditures to be switched from foreign to domestic goods as the country's exports rise and the country produces more to meet the domestic and foreign demand for goods with reduction in imports. Consequently, the balance of payments deficit is eliminated.

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

To correct disequilibrium in the balance of payments, government also adopts direct controls which aim at limiting the volume of imports. The government restricts the import of undesirable or unimportant items by levying heavy import duties, fixation of quotas, etc. At the same time, it may allow Imports o essential goods duty free or at lower import duties, or fix liberal import quotas for them.

For instance the government may allow free entry of capital goods, but impose heavy import duties on luxuries.' Import quotas are also fixed and the

importers are required to take licenses from the authorities in order to import certain essential commodities in fixed quantities. In these ways, imports are reduced in order to correct an adverse balance of payments. The government also imposes exchange controls. Exchange controls have a dual purpose. They restrict imports and also control and regulate the foreign exchange. With reduction in imports and control of foreign exchange, visible and invisible imports are reduced. Consequently, an adverse balance of payment is corrected.

#### **4. Adjustment through Capital Movements**

A country can use capital imports to correct a deficit in its balance of payments. A deficit can be financed by capital inflows. When capital is perfectly mobile within countries, a small rise in the domestic rate of interest brings a large inflow of capital. The balance of payments is said to be in equilibrium when the domestic interest rate equals the world rate. If the domestic interest rate is higher than the world rate, there will be capital inflows and the balance of payments deficit is corrected.

#### **5. Adjustment through Income Changes:**

Given the foreign exchange rate and prices in a country, an increase in the value of exports, causes an increase in the incomes of all persons associated with the export industries. These, in turn create demand for other goods and services within the country. This will raise the incomes of persons engaged in the latter industries and services. This process will continue and the national income increases by the value of the multiplier.

#### **6. Stimulation of Exports and Import Substitutes:**

A deficit in the balance of payments can also be corrected by encouraging exports. Exports can be encouraged by producing quality products, by reducing exports through increased production and productivity, and by better marketing. They can also be increased by a policy of import substitution it means that the country produces those goods which it imports. In the beginning, imports are reduced u in the long run exports of such goods start. An increase in exports causes the national income to rise by many times through the operation of the foreign trade multiplier. The foreign trade multiplier expresses the change in income caused by a change in exports.

Ultimately, the deficit in the balance of payments is removed when exports rise faster than imports.

### **7. Expenditure-Reducing policies:**

A deficit in the balance of payments implies an excess of expenditure over income. To correct it expenditure and income should be brought into equality. For this expenditure reducing monetary and fiscal policies are used. A contractionary or tight monetary policy relates to cut in interest rates to reduce money supply and a contractionary fiscal policy relates to reduction in government expenditure and or increase in taxes. Thus expenditure reducing policies reduce aggregate demand through higher taxes and interest rates, thereby reducing expenditure and output. The reduction in expenditure and output, in turn, reduces the domestic price level. This gives rise to switching of expenditure from foreign to domestic goods. Consequently, the country's imports are reduced and the balance of payments deficit is corrected.

### **Recent trends:**

Current trends are towards the increasing foreign trade and interdependence of firms, markets and countries. Intense competition among countries, industries, and firms on a global level is a recent development owed to the confluence of several major trends. Among these trends are:

#### **1) Forced Dynamism:**

International trade is forced to succumb to trends that shape the global political, cultural, and economic environment. International trade is a complex topic, because the environment it operates in is constantly changing. First, businesses are constantly pushing the frontiers of economic growth, technology, culture, and politics which also change the surrounding global society and global economic context. Secondly, factors external to international trade (e.g., developments in science and information technology) are constantly forcing international trade to change how they operate.

#### **2) Cooperation among Countries:**

Countries cooperate with each other in thousands of ways through international organisations, treaties, and consultations. Such cooperation generally encourages the globalization of business by eliminating restrictions

on it and by outlining frameworks that reduce uncertainties about what companies will and will not be allowed to do. Countries cooperate:

- i) To gain reciprocal advantages,
- ii) To attack problems they cannot solve alone, and
- iii) To deal with concerns that lie outside anyone's territory.

Agreements on a variety of commercially related activities, such as transportation and trade, allow nations to gain reciprocal advantages. For example, groups of countries have agreed to allow foreign airlines to land in and fly over their territories, such as Canada's and Russia's agreements commencing in 2001 to allow polar over flights that will save five hours between New York and Hong Kong. Groups of countries have also agreed to protect the property of foreign-owned companies and to permit foreign-made goods and services to enter their territories with fewer restrictions. In addition, countries cooperate on problems they cannot solve alone, such as by coordinating national economic programs (including interest rates) so that global economic conditions are minimally disrupted, and by restricting imports of certain products to protect endangered species. Finally, countries set agreements on how to commercially exploit areas outside any of their territories. These include outer space (such as on the transmission of television programs), non-coastal areas of oceans and seas (such as on exploitation of minerals), and Antarctica (for example, limits on fishing within its coastal waters).

### **3) Liberalization of Cross-border Movements:**

Every country restricts the movement across its borders of goods and services as well as of the resources, such as workers and capital, to produce them. Such restrictions make international trade cumbersome; further, because the restrictions may change at any time, the ability to sustain international trade is always uncertain. However, governments today impose fewer restrictions on cross-border movements than they did a decade or two ago, allowing companies to better take advantage of international opportunities. Governments have decreased restrictions because they believe that:

- i) So-called open economies (having very few international restrictions) will give consumers better access to a greater variety of goods and services at lower prices,
- ii) Producers will become more efficient by competing against foreign companies, and
- iii) If they reduce their own restrictions, other countries will do the same.

#### **4) Transfer of Technology:**

Technology transfer is the process by which commercial technology is disseminated. This will take the form of a technology transfer transaction, which may or may not be a legally binding contract, but which will involve the communication, by the transferor, of the relevant knowledge to the recipient. It also includes non-commercial technology transfers, such as those found in international cooperation agreements between developed and developing states. Such agreements may relate to infrastructure or agricultural development, or to international cooperation in the fields of research, education, employment or transport.

#### **5) Growth in Emerging Markets:**

The growth of emerging markets (e.g., India, China, Brazil, and other parts of Asia and South America especially) has impacted international trade in every way. The emerging markets have simultaneously increased the potential size and worth of current major international trade while also facilitating the emergence of a whole new generation of innovative companies. According to “A special report on innovation in emerging markets” by The Economist magazine, “The emerging world, long a source of cheap labour, now rivals the rich countries for business innovation”.

The value of global trade increased during Q1 2022, although its growth continued to decelerate. Overall, the value of global trade reached a record level of about US\$ 7.7 trillion in Q1 2022, an increase of about US\$ 1 trillion relative to Q1 2021, and of about US\$ 250 billion relative to Q4 2021. Trade in goods (merchandise) and trade in services both grew during Q1 2022. Trade in goods reached about US\$ 6.1 trillion (an increase of about 25 per cent relative to Q1 2021, and an increase of about 3.6 per cent relative to Q4 2021). Trade in services totalled about US\$ 1.6 trillion (an increase of about 22 per

cent relative to Q1 2021, and an increase of about 1.7 per cent relative to Q4 2021). Trade growth is expected to remain positive but continues to slow during Q2 2022. The import and export trends of some of the world's major trading economies further illustrate the patterns of trade growth during Q1 2022. Overall, trade in goods in all major economies was well above the pre-pandemic levels of 2019, for both imports and exports. Negative quarter-over-quarter rates reveal that import trends reversed for Brazil and the Russian Federation during Q1 2022. Export growth in this period remained strong for Brazil and South Africa. Data on services is reported with a lag of one quarter. In Q4 2021, trade in services of most major economies was still substantially lower than the pre-pandemic averages of 2019. However, as shown by quarter-over-quarter rates, trade in services of most major economies continued to recover during Q4 2021, with the exception of Brazil, Japan and the imports to the European Union.

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## **UNIT – V**

### **FREE TRADE VS PROTECTION**

#### **5.1. INTRODUCTION**

The foreign trade policy is concerned with whether a country should adopt the policy of free trade or of protection. If the policy of protection of domestic industries is adopted, the question which is faced whether protection should be achieved through imposing tariffs on imports or through the fixation of quota or through licensing of imports. The foreign trade policy has been the subject of heated discussion since the time of Adam Smith who advocated for free trade and recommended that tariffs should be removed to avail of the advantages of free trade. Even today, economists are divided over this question of foreign trade policy.

Various arguments have been given for and against free trade. If the policy of protection of domestic industries is adopted, the question is whether for this purpose tariffs should be imposed on imports or quantitative restrictions through quota and licensing be applied. In India certain political parties and group have been demanding a policy of 'Swadeshi' which in essence means that domestic industries should be protected against low-priced imports of goods from abroad, that is, free foreign trade should not be allowed.

Besides Adam Smith, the other famous classical economist David Ricardo in his famous work "On the Principles of Political Economy and Taxation" also defended free trade to promote efficiency and productivity in the economy. Adam Smith and the other earlier economists thought that it pays a country to specialise in the production of those goods it can produce more cheaply than any other country and import those goods it can obtain at less cost or price than it would cost to produce them at home. This means they should specialise according to absolute cost advantage. However, Ricardo put forward the 'Theory of Comparative Cost' where he demonstrated that to obtain benefits from trade it is not necessary that countries should produce these goods for which their absolute cost of production is the lowest. He proved that it could pay a country to import a good even though it could produce that good at a lower cost, if its cost is relatively lower in the



production of some other good. Ricardo's theory of trade rests on the idea of relative efficiency or comparative cost. Despite the classical arguments for free trade to promote efficiency and well-being of the people, various countries have been following the protectionist policies which militate against free trade. By imposing heavy tariff duties on imports of goods or fixing quotas of imports they have prevented free trade to take place between countries. Several arguments have been given in favour of protection. In what follows we spell out this free trade vs. protection controversy.

## **5.2. TRADE POLICY: TARIFFS AND QUOTAS:**

Despite many benefits of free trade, the various countries have put up barriers to trade to protect their domestic industries. A number of instruments are used to protect the domestic industries to free trade but most important are tariffs and quotas. Both tariffs and quotas can be imposed either on imports or exports but they are mostly imposed on imports. Barriers to exports are quite uncommon.

**We briefly explain below these tariff barriers:**

### **1. TARIFFS:**

Tariffs are excise duties imposed on imported goods. The objective of imposing tariffs may be either raising revenue for the Government or providing protection to the domestic industries.

**Therefore, two types of tariffs are distinguished:**

- (1) Revenue tariffs, and
- (2) Protective tariffs.

**Revenue tariffs** are usually imposed on the imports of those products which are not produced domestically. Rates of revenue tariffs are generally small but yields a good revenue for the Government. For example in USA, tariffs are imposed on tin, coffee and bananas which are not produced in that country. Their obvious purpose is to provide revenue to the Government.

**Protective tariff**, on the other hand are imposed to provide protection to the domestic producers from foreign competition. The rates of these tariffs are not so high as to completely prohibit their imports into a country. Rise in prices

of their products as a result of imposition of tariffs, foreign producers lose their superior competitive power.

## **2. IMPORT QUOTAS:**

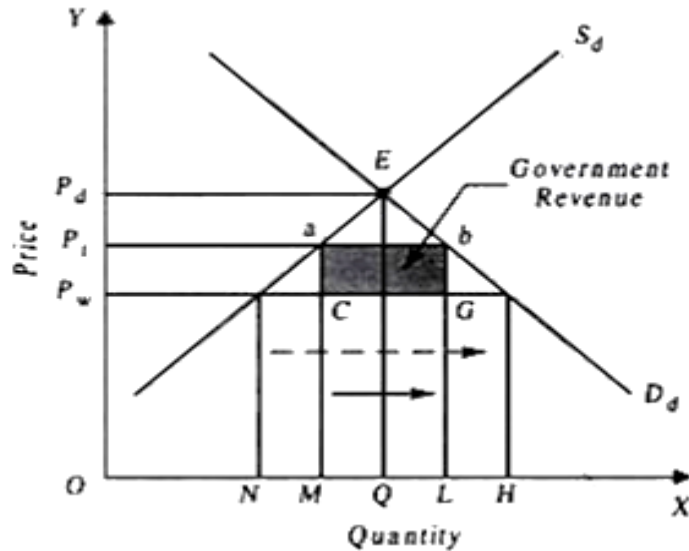
Import quotas are another instrument used to check free trade. Import quotas refer to the maximum quantities of goods which may be permitted to be imported during any period of time. They are also referred to as quantitative restrictions on imports. Quotas are more effective method of reducing trade than tariffs.

A given commodity may be imported in a relatively large quantity despite high tariffs but low quotas totally stop the imports of a commodity beyond the fixed quota of the commodity. Since international negotiations to reduce trade barriers have tended to focus on tariffs, the various countries have resorted to non-tariff barriers to free trade. We discuss below the effects of tariffs and quotas.

### **5.3. EFFECTS OF A TARIFF:**

Let us now examine the economic effects of tariffs used as a trade barrier to protect domestic industries. We use partial equilibrium approach represented by supply and demand analysis to examine the effects of tariffs. Let us take a product, say computer, in which India has a comparative disadvantage.

In Fig. 5.1 we have drawn domestic demand and supply curve  $D_d$  and  $S_d$  respectively of computers in India. In the absence of foreign trade, domestic price  $OP_d$  is determined at which  $OQ$  quantity of computers is demanded and sold. Assume now that the Indian economy is now opened to trade with USA which has a comparative advantage in the production of computers. Suppose  $OP_w$  represents the world price at which USA sells computers. We assume that when the Indian economy is opened to trade, it can import computers from the USA at this world price  $OP_w$ . In other words, free trade price is  $OP_w$ . It will be seen from Fig. 5.1 that at free trade  $OP_w$ , the domestic demand (or consumption) for computers is  $OH$  and the domestic producers are supplying  $ON$  quantity. Thus, with free trade out of  $OH$  quantity of consumption of computers, domestic production is  $ON$ . The quantity  $NH$  of computers is being imported.



**Fig 5.1. Economic Effects of a Tariff**

**Consumption Effect:**

Now suppose that in order to protect domestic computer industry India imposes a tariff of  $P_w P_t$  per computer. As a result price of computer in India will rise to  $OP_t$ . The imposition of tariff and consequently rise in the price of computers in India will have a variety of effects. First, as shall be seen from Fig. 5.1 that at a higher price  $OP_t$ , the consumption of computers in India will decline to  $OL$  computers as the higher price causes buyers of computers to move up the demand curve  $D_d$ . This is a consumption effect of the tariff. It follows that the Indian consumers of computers have been badly hurt by the imposition of tariff on computers. As a result of tariff, they pay  $P_w P_t$  more per computer which they now buy at the higher price. Besides, tariff induces them to buy fewer computers with the result that they reallocate a part of their expenditure to less desired substitute products.

**Production Effect:**

Second, tariff benefits Indian producers of computers as they will now be able to sell their computers at a higher price  $OP_t$  instead of free trade price  $OP_w$ . Further, at a higher price  $OP_t$ , they will produce and supply more computers by moving up the domestic supply curve  $S_d$ . It will be seen from Fig. 5.1 that at price  $OP_t$ , domestic producers of computers raises domestic production and quantity supplied from  $ON$  to  $OM$ . This is the production effect of tariff. It should be further noted that the increase in domestic production

of computers by NM implies that some scarce resources will be bid away from other presumably more efficient industries.

**Trade Effect:**

Third, as a result of imposition of tariff by India, American producers will be hurt. It may be noted that American producers would not get the higher price  $OP_t$  as the higher price is due to tariff which will be obtained by the Indian Government. For American producers price of computers will remain at  $OP_w$ . Since due to rise in price to  $OP_t$ , domestic production increases to OM and domestic consumption falls to OL, the imports of computers fall from NH to ML. This is trade effect of tariff.

**Revenue Effect:**

Now, the important effect which is to be examined is whether economic well-being of the nation will increase as a result of imposition of tariff. The answer is in the negative. Of course, the Indian Government will gain from tariff equal to the revenue it collects from tariff. With rise in price by  $P_w$   $P_t$  per computer and the import of computers reduced to ML, (or ab) the total revenue of the Government from tariff will be equal to the shaded area abGC. This is the revenue effect of tariff. This revenue from tariff obtained by the Government is “essentially a transfer of income from the consumers to government and does not represent any net change in the nation’s wellbeing. The result is that government gains a portion of what consumers lose.” But the effects of tariffs go beyond the basis of partial equilibrium analysis of demand and supply. The imposition of tariff on computers will reduce export earnings of American computer industry-the industry in which it has a comparative advantage. Because of lower exports of computers, the production of computers will be reduced in the USA.

This will cause the resources to be shifted from relatively more efficient computer industry to relatively inefficient industries of the USA in which it has a comparative disadvantage. Thus tariffs cause misallocation of resources. To conclude in the words of Professors McConnel and Brue, “specialisation and unfettered world trade based on comparative advantage would lead to the efficient use of world resources and an expansion of the world’s real output. The purpose and effect of protective tariffs are to reduce

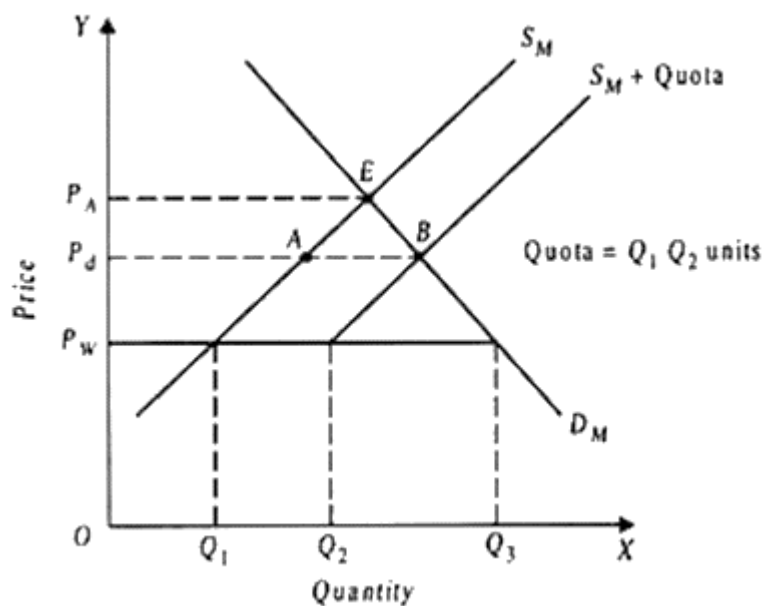
world trade. Therefore, aside from their specific effects upon consumers, foreign and domestic producers, tariffs diminish the world's real output."

#### **5.4. EFFECTS OF QUOTAS:**

Quotas are quantitative restrictions on the quantity or value of a commodity to be imported in a country during a period. Since quota limits the imports of a commodity, it reduces supply of a commodity in a country as compared to the case with a free trade. Like tariffs, quotas raise the prices of imported goods and encourage domestic production of those goods. But in case of quotas, the government does not collect any revenue. Quotas may be imposed against imports from all countries or used against the imports of only a few countries.

Economic effects of quota are graphically shown in Fig. 5.2 where  $D_M$  and  $S_M$  are domestic demand and supply curves of a commodity respectively. In the absence of trade, price of the commodity in the country is  $P_A$ . Suppose the world price of the product is  $P_w$ . Under free trade, at price  $P_w$  of the commodity the domestic producers of country will produce  $OQ_1$  quantity but as domestic demand of the product at price  $P_w$  is  $OQ_3$  the quantity  $Q_1 Q_3$  represents the imports at the world price  $P_w$ . Now assume that the Government imposes a quota and fixes the quantity of the product equal to  $Q_1Q_2$  to be imported.

With this the total supply of the product in the domestic market will be away from the domestic supply  $S_M$  equal to the distance  $Q_1Q_2$ . Incorporating the quota equal to  $Q_1Q_2$  we draw a new supply curve  $S_M + Quota$ , which lies to the left of the free-trade supply curve  $S_M$ . It will be seen from Fig. 5.2 that interaction of the supply curve ( $S_M + Quota$ ) with the domestic demand curve  $D_M$  determines price  $P_d$  which is higher than the world price  $P_w$ . The difference  $AB$  between demand and domestic supply at price  $P_d$  is exactly equal to the fixed quota of  $Q_1Q_2$  quantity of imports. It is thus clear that, like tariffs, fixation of quota has served to limit trade and raise price. It will therefore have same effects as we have explained in case of tariff. It may however be noted that, unlike tariff, in case of quota Government would not collect any revenue.



**Fig.5.2. Effects of Quota**

## **5.5. FREE TRADE**

### **5.5.1. MEANING**

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.

### **5.5.2. CASE FOR AND AGAINST FREE TRADE**

#### **ARGUMENTS FOR FREE TRADE:**

##### **i. Advantages of Specialization:**

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

##### **ii. All-Round Prosperity:**

Because of unrestricted trade, global output increases since specialization, 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:**

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 Produced Goods and Services:**

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:**

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:**

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 specialization, forces it to adopt less efficient production techniques and forces consumers to pay higher prices for the production of protected industries.

**5.5.3. Arguments against Free Trade:**

Following arguments are often cited against free trade:

**i. Advantageous not for LDCs:**

Free trade may be advantageous to the advanced countries but not to the 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:**

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. Inefficiency becomes Perpetual:**

Free trade cannot bring all-round development of industries. Comparative cost principle states that a country specializes 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:**

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 arose 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 the then Depression. Such overdependence following free trade also becomes catastrophic during war.

## **v. Penetration of Harmful Foreign Goods:**

Finally, a country may have to change its consumption habits. Because of free trade, even harmful commodities (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.

## **5.6. PROTECTION:**

### **5.6.1. MEANING OF PROTECTION**

Protection means protecting the home industries from foreign competition. The term protection refers to the policy of encouraging the home industries by giving subsidies to the home producers and by imposing duties on the foreign goods by raising their prices relative to those of domestically produced goods. In the general sense, protection may refer to the commercial



policy of protecting the national interests through restrictions on the international trade.

According to J.L. Hanson, protection means “the imposition of duties on imports in order to protect home producers of these commodities by making foreign produced goods and exempting native goods of a similar character, with the intention of preventing the markets of the country concerned.” According to the Penquin Dictionary, “protection is the imposition of tariffs of quotes to restrict the inflow of imports.” The mercantilists were the first to state their arguments in favour of protection. They advocated the theory of balance of trade, according to which a nation could only gain through foreign trade if it had excess in the value of exports over imports. But, this view was strongly criticised by the classical economists. The modern idea of protection as a means of stimulating economic growth was first developed by the American economist Alexander Hamilton in 1791. Later on, other Americans like Henry George, Mathew Carey, etc. also supported the idea. In Germany, the policy of protection was advocated by Frederich List in 19th century. After the World War I, particularly after Great Depression, almost all the countries of the world have abandoned free trade policy in favour of the policy of protection.

### **5.6.2. ARGUMENT FOR AND AGAINST PROTECTION**

#### **Arguments for Protection:**

The economists at different times put forward different arguments to justify the policy of protection. Some of the arguments are, however, proved to be fallacious and so cannot be accepted. There are some other arguments which prove to be good and so these are widely accepted.

We may discuss both types of arguments for protection:

#### **1. Infant Industries:**

Many developing countries, like India, Pakistan, Sri Lanka and Bangladesh have the conditions necessary to compete successfully in the international market, but they lack experience and expertise which take time to acquire.

The infant industry argument suggests that new industries should be given temporary protection in order to enable them to build up this experience. This

argument applies where the industry is small and young, and where costs are high but fall as the industry grows. According to this argument, there are some industries in which a country would really have comparative advantages if and only if it could get them started. If faced with foreign competition, such infant (young and growing) industries would not be able to pass the initial period of experiment and financial stresses.

But given protection for a short period, they can be expected to develop economies of mass production and they would ultimately be able to face foreign competition without protection. So, at the infant stage such industries should be protected for a period till they can face competition independently. The central idea of this argument is embodied in the saying- 'Nurse the baby, protect the child, and free the adult'. This argument now widely accepted in India as a good ground of protection for a temporary period for promoting home industries at the early stages. Critics, however, argue that most infant industries never grow up- that they continue to demand protection; so their customers continue to pay high prices. Once protection is given to such industries, it is a practice (mainly for political reasons), to remove it.

## **2. Diversification of Industries Argument:**

A policy of production is also advocated to diversify a developing country's industrial structure. A country cannot rely on one or a few industries only; it is necessary that a large number of industries of diverse varieties develop in the long run. This strategy will reduce the risk of losing foreign markets; for, in case of failure to export one commodity, other goods may be exported.

## **3. Employment Protection:**

The dynamics of the world economy mean that at any time some industries will be in decline. If those industries were responsible for a significant amount of employment in a country in the past, their decline would cause problems of regional unemployment. There is justification for a country to protect a contracting industry to slow down its rate of decline so that time is given for people to find jobs elsewhere in the economy.

#### **4. Employment Creation:**

Protection to home industries may create employment opportunities in the country, and thus reduce the magnitude of unemployment. But this argument is also fallacious; for protection may create employment in some home industries, but by reducing imports it reduces employment opportunities in the foreign countries.

So, such a beggar-my-neighbour high-tariff policy might create employment in the short run only before other nations retaliate. Protection can of course increase employment in another way. By improving the balance of trade it can increase employment and income provided the other countries do not retaliate. But even this argument is not convincing as protection cannot maintain high employment indefinitely through export surplus.

#### **5. Balance of Trade:**

Some countries experience imbalance in their trade with the rest of the world. If they are importing too many goods they may correct a temporary problem by imposing tariffs on imports. A suitable tariff policy can create and maintain a favourable balance of trade. The restrictions on imports for the purpose of protection will create a surplus in the balance of trade of the country. But this argument is wrong. If all countries simultaneously follow this policy, none would find foreign buyers for the sale of goods and so none would gain. However, Sir Arthur Lewis has put forward a counter argument here.

As he says: "National income cannot be increased by adding imports, since this would result only in diverting resources to the production of articles of domestic consumption, thereby withdrawing them from the most profitable export markets. Nor can domestic employment be increased by reducing imports because this would reduce exports to the same extent".

#### **6. Dumping to Reflect Low Marginal Cost of Production:**

Dumping is a problem which confronts many countries. It is an example of price discrimination at the international level. By following the practice of dumping foreign sellers try to capture the home market by selling their goods at low prices.

Protection of home industries is necessary to resist such a policy. It refers to the selling of products on overseas markets at prices below those prevailing on domestic markets. The danger here is that the dumping of products could cause prices to drop drastically.

This could benefit the consumers in the short run. But, in the long run, domestic producers could be forced out of business making room for the foreign suppliers in the future. Producers may be off-loading products on foreign markets to keep prices up in their home markets. The price of a Japanese camera, for example, is higher in Tokyo than in New York. Therefore, the effects of dumping are undesirable and, if it can be detected, some protection against its adverse effects is justified.

### **7. Improving the Terms of Trade:**

Countries can improve their position when they are the sole (or dominant) buyer of a commodity. This is rare, but if American importers of tea agreed with one another to restrict imports' then the world price would fall. Of course, this would lower the incomes received by the producers of tea and so might be thought undesirable as they are mostly poor countries.

### **8. Retaliation:**

Protecting an industry as a retaliation for protection introduced by other countries is questionable. It was used by the USA when it felt that the European Union was using hidden subsidies to lower the price of steel exported to the USA.

### **9. Unfair Foreign Competition:**

Often countries follow a policy of protectionism against unfair foreign competition. 'Unfair' competition can take a variety of forms. Sometimes, foreign governments can subsidise their export industries. This means that domestic industries cannot compete fairly.

Similarly, foreign firms may 'dump' their products overseas, either because they cannot be sold on their domestic market, or in order to destroy competitor. They could then increase their prices and make large profit. Countries also require protection against low-cost imports.

It is often argued that declining industries need a period of protection in order to allow the decline to take place gradually, so that workers can retrain as

new industries develop. A variation of this approach says that industries in high wage countries should have protection against goods made by low-paid labour. This, of course, denies the advantages of comparative advantage which derive from lower- costs. Instead, the argument is that if foreign firms pay low wages, this is a form of unfair competition and domestic firms should be protected. This would safeguard the position of domestic workers Critics, however, argue that this would, in fact, reduce the wages of workers in poor countries and make consumers of rich countries pay higher prices.

Protecting an industry against ‘unfair’ competition is also questionable countries often will claim that competition is unfair when, in fact, a country may just be using its comparative advantage to lower costs. This argument is used against some of the low-wage economies and the difficult issue is to decide whether wages are low due to the abundance of labour as a factor of production or whether exploitation is present. If the latter is the case, protection may not be the answer to the problem.

### **5.6.3. Fallacious Arguments:**

The following arguments for protection are found to be fallacious:

#### **1. Keeping Money at Home Argument:**

According to Abraham Lincon, protection prevents the purchase of foreign goods and thereby keeps money at home. But this argument loses much of its weight when we observe that owing to protection the people of the country are to pay higher prices for home-produced goods.

#### **2. Home Market Argument:**

It is argued by Henry Clay and other American protectionists that the restriction on the imports of foreign goods will create a wide domestic market for the products of the home industries. But this argument is also fallacious because protection, by curtailing imports, will reduce exports’ too. It is true that home industries will lose the foreign markets if the same policy is pursued by foreigners.

#### **3. National Defence Argument:**

Industries which are essential for the defence (e.g., arms and ammunitions, military equipment, etc.) of the country are to be protected to preserve the national independence of a country. The policy of discriminating

protection as adopted in India also in 1949-50 prescribed protection for defence industries at any cost.

#### **4. National Self-Sufficiency Argument:**

Protection is also advocated to attain self-sufficiency in essential goods. The industries which are essential for national self-sufficiency are to be protected. This is really a convincing argument for protection in developing countries like India. In fact, national interest is the sole criterion for granting protection to industries in such countries.

#### **Arguments against Protection:**

The policy of protection is also criticised on various grounds:

- (a) It creates obstacles or barriers to free multinational trade. Due to high tariffs imposed by other countries, a country is not allowed to produce goods in which it has cost advantages. So, protection reduces world production and consumption of internationally traded goods,
- (b) Owing to higher tariff on imports, the consumers are compelled to buy home goods, often of inferior quality and often at higher prices,
- (c) Protection gives shelter to weak home industries. If it is permanent, home industries would not get any incentive to compete freely with their foreign counterparts. There would be need for continuation of protection for an indefinite period,
- (d) Protection may lead to trade wars and international conflicts among trading nations,
- (e) Protection give rise to such abuse as 'wire-pulling' in political quarters, vested interest in the protected sector, etc.

#### **5.7. METHODS OF PROTECTION:**

The following are the important forms or methods of protection which a country can adopt in its commercial policy and the selection of the method depends upon the purpose in hand:

##### **I. TARIFFS:**

Tariff or import duty is a tax on imports. According to I. Walter, "A tariff is a charge levied on goods as they enter a country by crossing the nation customs frontier." P.T. Ellsworth defines tariff as "a schedule of duties levelled

upon the importation of commodities into a given nation from abroad.” A tariff is different from a transit duty which is imposed on commodities passing through country. Generally the aim of tariff is to reduce imports by raising their price.

**Tariffs can be of three types:**

(i) Special tariffs constitute a fixed monetary duty per unit of the imported commodity. For example, Rs. 30,000 per automobile may be charged as tariff on the imported automobiles.

(ii) Ad Valorem tariffs are levied as percentage of the total value of the commodity as it enters the country, including its cost and transportation charges. For example, 300% of the total value of the imported color T. V. may be charged as tariff.

(iii) Sliding scale tariffs are imposed in relation to the price of the commodity; when the price falls, tariff is reduced and when the price rises, tariff is increased. Sliding scale tariff maybe specific i.e., according to the number of commodities) or ad valorem (i. e., according to the value of the commodity).

**II. IMPORT QUOTAS:**

Import quota is a quantitative restriction on imports. It constitutes an absolute limit on the physical quantity or the value of goods and services that may be imported over a given period of time, say, a year or a month.

Import quotas aim at controlling and regulating imports to protect the home industries from foreign competition and to remove disequilibrium in the balance of payments. While tariffs indirectly reduce imports, quotas have direct and physical control on imports.

**Import quotas are of different types:**

**(a) Tariff Quotas:**

Under the tariff quota system, a fixed quantity of a commodity is allowed to be imported free or on a low duty. But, when the imports exceed this limit, higher import duties are charged. Thus, tariff quotas combine both the tariff and quota systems.

**(b) Unilateral Quotas:**

Unilateral quota is fixed unilaterally without taking the exporting countries in confidence; an absolute limit is autonomously fixed on

commodities imported. Unilateral quotas may be global or allocative. (a) Under the global or non-discriminatory quota system, the permitted quantities can be imported from any country of the world, (b) Under the allocative or selective or discriminatory quota system, the permitted quantities can be imported from a particular country or group of countries.

**(c) Bilateral Quotas:**

Under this system, quotas are fixed after entering into bilateral agreements with the exporting countries. Bilateral quotas are also called agreed quotas.

**(d) Mixed Quotas:**

Under this system, the domestic producers are asked to use a minimum proportion of domestic inputs along with the imported inputs. Protection is thus provided not only to the domestic producers, but also to the domestic suppliers of inputs.

**(e) License Quotas:**

Under this system, licenses are also issued to the importers along with fixation of quotas. The authorities give licenses to limit the permitted quantities to be imported by a few selected importers. The licenses maybe issued either on the basis of 'first come first served' or on the fulfilment of some import requirements.

**III. Import Restrictions:**

Various forms of restrictions on imports are also used to reduce imports and encourage domestic production, (a) Sometimes import of certain commodities is prohibited by law to protect the home industries, (b) A country may refuse to permit the importation of vegetables, flowers, meats, etc., on the health grounds, (c) A country may instruct the customs officials to check every item and ensure the correctness of the commodities. The delays and damage to goods caused by such regulations may reduce imports.

**IV. Exchange Control:**

Exchange control, i.e., controlling and rationing foreign exchange, is also used as a protective method. Under the exchange control system, the government has full control over the foreign exchange resources and foreign exchange business of the country. The importers are allotted foreign exchange



at the official rates and according to set priorities to enable them to make payments for the imported goods. In this way, through effective exchange control, the volume of imports can be reduced.

#### **V. Discrimination:**

Discrimination refers to the system of- (a) differing tariffs or quotas on imports of goods; or (b) differing exchange control practices; or (c) multiple exchange rates applied to different countries. Thus, under this system, preferential treatment is given to certain countries and commodities against others by making discrimination in trade and exchange controls. Such discriminatory arrangements reduce international trade, create trade blocks and lead to retaliation.

#### **VI. Subsidies:**

Subsidy is a financial help given by the government to the domestic producers to make them more competitive in the international markets. When the cost of production of the domestic producers is very high and they cannot face the foreign competition, the government can help them in the form of cash incentives, tax concessions, making up the loss, etc.

Subsidies do not restrict imports directly, but indirectly discourage them. They reduce the domestic prices, increase demand for domestic goods and thus reduce imports. Subsidies also have favourable effect on domestic Income and employment.

#### **VII. State Trading:**

Under the system of state trading, the government gets control over the entire foreign trade in its own hands. In this way it becomes easier for the government to regulate foreign trade according to the requirement of the country. The government may employ the method of state trading- (a) to import only the socially necessary goods and to check the non-essential imports; (b) to secure favourable terms from the foreign exporters and to utilise the gains from international trade for public welfare; and (c) to promote the exports of the country.

**VIII. Devaluation:**

The policy of devaluation, i.e., lowering the value of the home currency in terms of foreign currency, may be adopted as a method of protection. Devaluation reduces imports by making them dearer and encourages exports by making them cheaper.

**IX. Boycott of Foreign Goods:**

The imported goods maybe boycotted within the country by arousing the spirit of nationalism among the people. This provides natural protection to the domestic industries.

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