Module 1

1

INTRODUCTION TO INTERNATIONAL TRADE

Unit Structure:

1.0 OBJECTIVES

- To understand the concept of international economics
- To study definition of international trade
- To understand importance of international trade
- To study the benefits of foreign trade
- To understand the benefits of foreign investment

- To understand the comparative cost advantages theory
- To study the Ricardian approach of cost advantages
- To study the views of Taussig's restatement
- To understand the misconception about comparative advantages.
- To understand Pauper Labour argument

1.1 INTRODUCTION

International Trade Theory deals with the different models of international trade that have been developed to explain the diverse ideas of exchange of goods and services across the global boundaries. The theories of international trade have undergone a number of changes from time to time. The basic principle behind international trade is not very much different from that involved in the domestic trade. The primary objective of trade is to maximize the gains from trade for the parties engaged in the exchange of goods and services. Be it domestic or international trade, the underlying motivation remains the same. The cost involved and factors of production separate international trade from domestic trade.

International trade involves across border exchange andthis increases the cost of trading. Factors like tariffs, restrictions, time costs and costs related with legal systems of the countries involved in trade make the international trade a costly affair; whereas the extent of restrictions and legal hassles are considerably low in case of domestic trade.

When it comes to the comparison between international trade and domestic trade, the factors of production assume a crucial role. There is no denying that mobility of factors of production is less across nations than within the domestic territory. The incidence of trade in factors of production like labor and capital is very common in case of domestic trade; while in case of international trade exchange of goods and services contributes the major share of the total revenue.

International trade theory has always been a preferred field of research amongst the traditional and contemporary economists. The international trade models attempt to analyze the pattern of international trade and suggest ways to maximize the gains from trade. Among the different international trade theories, the Ricardian model, the Heckscher- Ohlin model and the Gravity model of trade are worth mentioning.The Ricardian model of international trade is developed on the theory of comparative advantage. According to this model countries involved in trade, specialize in producing the products in which they have comparative advantage.

The Heckscher-Ohlin model put stress on endowments of factors of production as basis for international trade. As per this theory countries will specialize in and export those products, which make use of the domestically abundant factors of production more intensively than those factors, which are scarcely available in the home country.

The Gravity model of trade provides an empirical explanation of international trade. According to this model, the economic sizes and distance between nations are the primary factors that determine the pattern of international trade.

The international trade theories also deal with challenges before international trade, international trade laws, rules of international trade and many other related issues.

1.2 DEFINITION OF INTERNATIONAL TRADE

The economic interaction among different nations involving the exchange of goods and services, that is, exports and imports. The guiding principle of international trade is comparative advantage, which indicates that every country, no matter their levelof development, can find something that it can produce cheaper than another country. International finance, the study of payments between nations, is a related area of international economics. A summary of international trade undertaken by a particular nation is given with the balance of trade.

A branch of economics that studies economic interactions among different countries, including foreign trade (exports and imports), foreign exchange (trading currency), balance of payments, and balance of trade. While much of the interaction among countries is largely an extension of basic economic principles, complications do arise because nations are distinct political entities, with different laws and cultures, and with little or no overall governmental oversight. The guiding principle in the study of international economics is comparative advantage, which indicates that every country, no matter their level of development, can find something that it can produce cheaper than another country. The study of international economics focuses on two related areas -- international trade and international finance.

1.3 CLASSICAL VIEW OF INTERNATIONAL TRADE

The law of *comparative advantage* provides a logical explanation of international trade as the rational consequence of the comparative advantages that arise from inter-regional differences - regardless of how those differences arise. Since its exposition by John Stuart Mill the techniques of neo-classical economics have been applied to it to model the patterns of trade that would result from various postulated sources of comparative advantage. However, extremely restrictive (and often unrealistic) assumptions have had to be adopted in order to make the problem amenable to theoretical analysis. The best-known of the resulting models, the Heckscher-Ohlin theorem (H-O) depends upon the assumptions of no international differences of technology, productivity, or consumer preferences; no obstacles to pure competition or free trade and no scale economies. On those assumptions, it derives a model of the trade patterns that would arise solely from international differences in the relative abundance of labour and capital (referred to as factor endowments). The resulting theorem states that, on those assumptions, a

country with a relative abundance of capital would export capital-intensive products and import labour-intensive products. The theorem proved to be of very limited predictive value, as was demonstrated by what came to be known as the "Leontief Paradox" (the discovery that, despite its capital-rich factor endowment, America was exporting labour-intensive products and importing capital-intensive products) Nevertheless the theoretical techniques (and many of the assumptions) used in deriving the H-O model were subsequently used to derive further theorems. The Stolper-Samuelson theorem, which is often described as a corollary of the H-O theorem, was an early example. In its most general form it states that if the price of a good rises (falls) then the price of the factor used intensively in that industry will also rise (fall) while the price of the other factor will fall (rise). In the international trade context for which it was devised it means that trade lowers the real wage of the scarce factor of production, and protection from trade raises it. Another corollary of the H-O theorem is Samuelson's factor price equalisation theorem which states that as trade between countries tends to equalise their product prices, it tends also to equalise the prices paid to their factors of production. Those theories have sometimes been taken to mean that trade between an industrialised country and a developing country would lower the wages of the unskilled in the industrialised country. (But, as noted below, that conclusion depends upon the unlikely assumption that productivity is the same in the two countries). Large numbers of learned papers have been produced in attempts to elaborate on the H-O and Stolper- Samuelson theorems, and while many of them are considered to provide valuable insights, they have seldom proved to be directly applicable to the task of explaining trade patterns.

1.4 MODERN VIEW OF INTERNATIONAL TRADE

Modern trade theory moves away from the restrictive assumptions of the H-O theorem and explores the effects upon trade of a range of factors, including technology and scale economies. It makes extensive use of *econometrics* to identify from the available statistics, the contribution of particular factors among the many different factors that affect trade. The contribution of differences of technology has been evaluated in several such studies. The temporary advantage arising from a country's development of a new technology is seen as contributory factor in one study. Other researchers have found research and development expenditure, patents issued, and the availability of skilled labor, to be indicators of the technological leadership that enables some countries to produce a flow of such technological innovations and have found that technology leaders tend to export hi-tech products to others and receive imports of more standard products from them. Another econometric study also established a correlation between country size and the share of exports made up of goods in the production of which there are scale economies. It is further suggested in that study that internationally-traded goods fall into three categories, each with a different type of **comparative advantage:**

- goods that are produced by the extraction and routine processing of available natural resources – such as coal, oil and wheat, for which developing countries often have an advantage compared with other types of production – which might be referred to as "Ricardo goods";

- low-technology goods, such as textiles and steel, that tend to migrate to countries with appropriate factor endowments - which might be referred to as "Heckscher-Ohlin goods"; and,

- High-technology goods and high scale-economy goods, such as computers and aeroplanes, for which the comparative advantage arises from the availability of R&D resources and specific skills and the proximity to large sophisticated markets.

Check Your Progress:

1. What do you mean by international trade?
2. Define international trade.
3. Discuss modern view of international trade.

1.5 THE IMPORTANCE OF INTERNATIONAL ECONOMICS

The international trade (or Economics) is merely an application of general economics in the particular context. Economics deals with the proper allocation and efficient use of scarce resources. *International economics is also concerned with allocation of economic resources among countries.* Such allocation is done in the world markets by means of international trade. Under the concept of free trade, the best products are produced and sold in a free competitive market. Such benefits of production efficiency like better quality and lower price are available to all peoples of the world.

One fundamental principle in international trade is that one should buy goods and services from a country which has the lowest price, and sell his goods and services to a country which has the highest price. This is good for the buyers and for the sellers. Another, with free trade, the less developed countries has the opportunities to accelerate the pace of their economic development. They can import machines and adapt foreign technology. They can send their scholars and technocrats to more progressive countries to gain more knowledge and skills which are relevant to the particular needs of their developing economies.

In the final analysis, no country in the world can be economically independent without a decline in its economic growth. Even the richest countries buy raw materials for their industries from the poorest countries. If every country produces only for its own needs, then production and consumption of goods would be limited. Clearly, such situation hampers economic progress. Furthermore, the standard of living of the people all over the world would have no chance to improve.

Because of international trade, people with money can acquire goods and services which are not available in their own countries. Hence, satisfaction of consumers can be maximized.

1.6 BENIFITS OF FORIGN TRADE

International trade allows countries to exchange goods and services with the use of money as a medium of exchange. Several advantages can be identified with reference to international trade. However international trade does have its limitations as well. Discussed below are both advantages and disadvantages of international trade.

Greater variety of goods available for consumption – international trade brings in different varieties of a particular product from different destinations. This gives consumers a wider array of choices which will not only improve their quality of life but as a whole it will help the country grow.

Efficient allocation and better utilization of resources since countries tend to produce goods in which they have a comparative advantage. When countries produce through comparative advantage, wasteful duplication of resources is prevented. It helps save the environment from harmful gases being leaked into theatmosphere and also provides countries with a better marketingpower.

Promotes efficiency in production as countries- will try to adopt better methods of production to keep costs down in order to remain competitive. Countries that can produce a product at the lowest possible cost will be able to gain a larger share in the market.Therefore an incentive to produce efficiently arises. This will help standards of the product to increase and consumers will have a good quality product to consume.

• **More employment could be generated** as the market for the countries' goods widens through trade. International trade helps generate more employment through the establishment of newer industries to cater to the demands of various countries. This will help countries bring down their unemployment rates.

1.7 FOREIGN DIRECT INVESTMENT

- Foreign investment comprises foreign direct investment (FDI) and foreign portfolio investment (FPI). The two categories are conceptually distinct in several respects. FDI represents a long-term vision and strategic commitment of the investors to the recipient economy. In contrast, FPI is intrinsically short-term aiming to maximize risk-return payoffs from capital markets. While both FDI and FPI are reflected in capital structures of resident enterprises as equity held by non-resident entities, FDI is distinguished by the investor's desire to hold a controlling stake in the enterprise.3 In this respect, foreign investment policies of host economies usually refer to FDI policies with operational procedures for portfolio investment being functionally inclusive aspects of such policies.

- India's present policy framework for inward FDI was introduced by the Industrial Policy Statement of July 24, 1991. The framework has subsequently evolved and enlarged in line with reforms and structural developments in the economy. The present policy allows foreign investors to invest in resident entities through either the *automatic* routeor the *government-administered* route.

- Most sectors and activities qualify for the automatic route. This route allows investors to bring in funds without obtaining prior permission from the Government, RBI, or any otherregulatory agency. However, invested enterprises are required to inform RBI within 30 days of receipt of funds and also comply with documentation requirements within 30 days of issue of shares to foreign investors. Certain investment intentions do not qualify under automatic route and require prior permission from the government. There are also sectors/activities where despite being eligible for automatic route, foreign investment is subject to other caveats.

- Foreign Direct Investment (FDI) is now recognized as an important driver of growth in the country. Government is, therefore, making all efforts to attract and facilitate FDI and investment from Non Resident (NRIs) including Overseas Corporate Bodies (OCBs) that are predominantly owned by them, to complement and supplement domestic investment. To make the investment in India attractive, investment and returns on them are freely repatriable, except where the approval is subject to specific conditions such as lock -in period on original investment, dividend cap, foreign exchange neutrality, etc. as per the notified sectoral policy. The condition of dividend balancing that was applicable to FDI in 22 specified consumer goods industries stands withdrawn for dividends declared after 14th July 2000, the date on which Press Note No. 7 of 2000 series was issued.

- Foreign direct investment is freely allowed in all sectors including the services sector, except a few sectors where the existing and notified sectoral policy does not permit FDI beyond a ceiling.

- FDI for virtually all items/activities can be brought in through the Automatic Route under powers delegated to the Reserve Bank of India (RBI), and for the remaining items/activities through Government approval. Government approvals are accorded on the recommendation of the Foreign Investment Promotion Board (FIPB).

- Foreign Direct Investment (FDI) in India in growing rapidly. Foreign direct investment is an integral part of an open and effective international economic system and a major catalyst to development. FDI is highly beneficial for a country like India. Empirical studies suggest that FDI triggers technology spillovers, assists human capital formation, contributes to international trade integration, helps create a more competitive business environment and enhances enterprise development. All these factors contribute to higher economic growth and consequently aid in alleviating poverty. Apart from bestowing

economic benefits FDI may also help improve environmental and social conditions by transferring "cleaner" technologies and leading to more socially responsible corporate policies.

Foreign Direct Investment in India is permitted as under the following forms of investments:

- Through financial collaborations.
- Through joint ventures and technical collaborations.
- Through capital markets via Euro issues.
- Through private placements or preferential allotments.

FDI is not permitted in the following industrial sectors:

- Arms and ammunition.
- Atomic Energy.
- Railway Transport.
- Coal and lignite.
- Mining of iron, manganese, chrome, gypsum, sulphur, gold, diamonds, copper, zinc.

Foreign direct investments in India are approved through two routes:

1. Automatic approval by RBI: The Reserve Bank of India accords automatic approval within a period of two weeks (provided certain parameters are met) to all proposals involving:

- Foreign equity up to 50% in 3 categories relating to miningactivities.
- Foreign equity up to 51% in 48 specified industries.
- Foreign equity up to 74% in 9 categories.

Investments in high-priority industries or for trading companies primarily engaged in exporting are given almost automatic approval by the RBI.

FDI in India on automatic route is not allowed in the following sectors:

- Proposals that require an industrial licence and cases where foreign investment is more than 24% in the equity capital of units manufacturing items reserved for the small scale industries.
- Proposals in which the foreign collaborator has a previous venture/tie-up in India.
- Proposals relating to acquisition of shares in an existing Indian company in favour of a Foreign/Non-Resident Indian (NRI)/Overseas Corporate Body (OCB) investor; and

- Proposals falling outside notified sectoral policy/caps or under sectors in which FDI is not permitted and/or whenever any investor chooses to make an application to the ForeignInvestment Promotion Board and not to avail of the automatic route.

2. FIPB Route: Foreign Investment Promotion Board (FIPB) is a competent body to consider and recommend foreign direct investment, which do not come under the automatic route. Normal processing time of an FDI proposal in FIPB is 4 to 6 weeks. FIPB is located in the Department of Economic Affairs, Ministry of Finance. Its constitution is as follows:

- Secretary, Department of Economic Affairs (Chairman)
- Secretary, Department of Industrial Policy & Promotion(Member)
- Secretary, Department of Commerce (Member)
- Secretary, (Economic Relation), Ministry of External Affairs(Member)

FIPB can co-opt Secretaries to the Govt. of India and other top officials of financial institutions, banks and professional experts of industry and commerce, as and when necessary.

1.8 FOREIGN INVESTMENT IMPLEMENTION AUTHORITY (FIIA)

Government has set up Foreign Investment Implementation Authority (FIIA) to facilitate quick translation of Foreign Direct Investment (FDI) approvals into implementation by providing a pro- active one stop after care service to foreign investors, help them obtain necessary approvals and by sorting their operational problems. FIIA is assisted by Fast Track Committee (FTC), which have been established in 30 Ministries/ Departments of Government of India for monitoring and resolution of difficulties for sector specific projects.

1.9 BENEFITS OF FOREIGN INVESTMENT

1. One of the advantages of foreign direct investment is that ithelps in the economic development of the particular country where the investment is being made.
2. This is especially applicable for the economically developing countries. During the decade of the 90s foreign direct investment was one of the major external sources of financing
3. for most of the countries that were growing from an economic perspective. It has also been observed that foreign direct investment has helped several countries when they have faced economic hardships.
4. An example of this could be seen in some countries of the East Asian region. It was observed during the financial problems of 1997-98 that the amount of foreign direct investment made in these countries was pretty steady. The other forms of cash inflows in a country like debt flows and portfolio equity had suffered major setbacks. Similar

observations have been made in Latin America in the 1980s and in Mexico in 1994-95.

5. Foreign direct investment also permits the transfer of technologies. This is done basically in the way of provision of capital inputs. The importance of this factor lies in the fact that this transfer of technologies cannot be accomplished by way of trading of goods and services as well as investment of financial resources. It also assists in the promotion of the competition within the local input market of a country.
6. The countries that get foreign direct investment from another country can also develop the human capital resources by getting their employees to receive training on the operations of a particular business. The profits that are generated by the foreign direct investments that are made in that country can be used for the purpose of making contributions to the revenues of corporate taxes of the recipient country.
7. Foreign direct investment helps in the creation of new jobs in a particular country. It also helps in increasing the salaries of the workers. This enables them to get access to a better lifestyle and more facilities in life. It has normally been observed that foreign direct investment allows for the development of the manufacturing sector of the recipient country.
8. Foreign direct investment can also bring in advanced technology and skill set in a country. There is also some scope for new research activities being undertaken.
9. Foreign direct investment assists in increasing the income that is generated through revenues realized through taxation. It also plays a crucial role in the context of rise in the productivity of the host countries. In case of countries that make foreign direct investment in other countries this process has positive impact as well. In case of these countries, their companies get an opportunity to explore newer markets and thereby generate more income and profits.
10. It also opens up the export window that allows these countries the opportunity to cash in on their superior technological resources. It has also been observed that as a result of receiving foreign direct investment from other countries, it has been possible for the recipient countries to keep their rates of interest at a lower level.
11. It becomes easier for the business entities to borrow finance at lesser rates of interest. The biggest beneficiaries of these facilities are the small and medium-sized business enterprises.

Check Your Progress:

1. Discuss the advantages and disadvantages of international trade.
2. What do you understand by Foreign Direct Investment?
3. Write a note on Foreign Investment Implementation Authority.

1.10 COMPARATIVE COST ADVANTAGE

The idea of comparative advantage is simple and most important in the field of international trade. If our country can produce some set of goods at lower cost than a foreign country, and if the foreign country can produce some other set of goods at a lower cost than we can produce them, then clearly it would be best for us to trade our relatively cheaper goods for their relatively cheaper goods. In this way both countries may gain from trade.

The original idea of comparative advantage dates to the early part of the 19th century. Although the model describing the theory is commonly referred to as the "Ricardian model", the original description of the idea can be found in an 'Essay on the External Corn Trade' by Robert Torrens in 1815. David Ricardo formalized the idea using a compelling, yet simple, numerical example in his 1817 book titled, "On the Principles of Political Economy and Taxation". The idea appeared again in James Mill's "Elements of Political Economy" in 1821. Finally, the concept became a key feature of international political economy upon the publication of "Principles of Political Economy" by John Stuart Millin 1848.

A country has a comparative advantage in the production of a good if it can produce that good at a lower opportunity cost relative to another country. Thus the US has a comparative advantage in cheese production relative to France if:

$$\frac{a^*_{LW}}{a^*_{LC}}\left(\frac{3}{6}\right) < \frac{a_{LW}}{a_{LC}}\left(\frac{2}{1}\right)$$

This means that the US must give up less wine to produce another pound of cheese than France must give up to produce another pound. It also means that the slope of the US PPF is flatter than the slope of France's PPF.

Starting with the inequality above, cross multiplication implies the following,

$$\frac{aLC}{aLW} < \frac{a^*LC}{a^*LW} \rightarrow \frac{a^*LW}{a^*LC} < \frac{aLW}{aLC}$$

This means that France can produce wine at a lower opportunity cost than the US. In other words France has a comparative advantage in wine production. This also means that if the US has a comparative advantage in one of the two goods, France must have the comparative advantage in the other good. It is not possible for one country to have the comparative advantage in both of the goods produced.

Suppose one country has an absolute advantage in the production of both goods. Even in this case each country will have a comparative advantage in the production of one of the goods. For example, suppose a_{LC} = 10,

$a_{LW} = 2$, $a_{LC}^{*} = 20$, $a_{LW}^{*} = 5$. In this case $a_{LC}(10) < a_{LC}^{*}(20)$ and $a_{LW}(2) < a_{LW}^{*}(5)$ so the US has the absolute advantage in the production of both wine and cheese.

$$\frac{a^{*}_{LC}}{a^{*}_{LW}}\left(\frac{20}{5}\right) < \frac{aLC}{aLW}\left(\frac{10}{2}\right)$$

However, it is also true that so that France has the comparative advantage in cheese production relative to the US.

Another way to describe comparative advantage is to look at the relative productivity advantages of a country. In the US thelabour productivity in cheese is 1/10 while in France it is 1/20. This means that the US productivity advantage in cheese is (1/10)/(1/20)= 2/1. This means the US is twice as productive as France in cheese production. In wine production the US advantage is (1/2)/(1/5) = (2.5)/1. This means the US is two and one-half timesas productive as France in wine production.

The comparative advantage good in the US then is that good in which the US enjoys the greatest productivity advantage, wine. France's comparative advantage good however, is that good in which it has the least productivity disadvantage in production, namely cheese.

The only case in which neither country has a comparative advantage is when the opportunity costs are equal in both countries. In other words, when

$$\frac{aLC}{aLW} = \frac{a^{*}_{LC}}{a^{*}_{LW}}$$

then neither country has a comparative advantage. It would seemhowever, that this is an unlikely occurrence.

1.11 RICARDO: THE THEORY OF COMPARATIVE ADVANTAGES

Highlights:

- **Trade occurs due to differences in production technology.**

The Ricardian model is constructed such that the only difference between countries is in their production technologies. All other features are assumed identical across countries. Since trade would occur and be advantageous, the model highlights one of the main reasons why countries trade; namely, differences in technology.

- **Trade is advantageous for everyone in both countries.**

Although most models of trade suggest that some people would benefit and some lose from free trade, the Ricardian model shows that everyone could benefit from trade. This can be shown using an aggregate representation of welfare (national indifference curves) or by calculating the change in real wages to workers. However, one of the reasons for this

outcome is the simplifying assumption that there is only one factor of production.

- **Even a technologically inferior country can benefit fromfree trade.**

This interesting result was first shown by Ricardo using a simple numerical example. The analysis highlights the importanceof producing a country's comparative advantage good rather than its absolute advantage good.

- **A developed country can compete against some low foreign wage industries.**

The Ricardian model shows the possibility that an industry ina developed country could compete against an industry in a less developed country even though the LDC industry pays its workers much lower wages.

Assumptions:

Following are the assumption of the Ricardian Model:

- There are two countries, producing two goods, using one factor of production, usually labour. The model is a general equilibrium model in which all markets (i.e., goods and factors) are perfectly competitive.
- The goods produced are assumed to be homogeneous across countries and firms within an industry. Goods can be costlesslyshipped between countries (i.e., there are no transportation costs).
- Labor is homogeneous within a country but may have different productivities across countries. This implies that the production technology is assumed to differ across countries.
- Labor is costlessly mobile across industries within a country but is immobile across countries. Full employment of labour is alsoassumed.
- Consumers (the laborers) are assumed to maximize utility subject to an income constraint.

Numerical example:

The simplest way to demonstrate that countries can gainfrom trade in the Ricardian model is by use of a numerical example. This is how Ricardo presented his argument originally. The example demonstrates that both countries will gain from trade if they specialize in their comparative advantage good and trade some of it for the other good. We set up the example so that one country (the US) has an absolute advantage in the production of both goods. Ricardo's surprising result was that a country can gain from trade even if it is technologically inferior in producing every good. Adam Smith had explained in the Wealth of Nations thattrade is advantageous to both countries, but in his example each country had an absolute advantage in one of the goods. That trade could be advantageous if each country specializes in the good in which it has the technological edge is not surprising at all.

Suppose the exogenous variables in the two countries take thevalues in the following table.

US	$a_{LC} = 1$	$a_{LW} = 2$	$L = 24$
France	$a_{LC}^* = 6$	$a_{LW}^* = 3$	$L^* = 24$

Table 1.1

By assumption the U.S. has the absolute advantage in cheese production and wine production since $a_{LC}(1) < a_{LC}^{*(6)}$ and $a_{LW}(2) < a_{LW}^*(3)$.

The US also has the comparative advantage in cheese production since. $\frac{a_{LC}}{a_{LW}}\left(\frac{1}{2}\right) < \frac{a_{LC}^*}{a_{LW}^*}\left(\frac{6}{3}\right)$

The cost of producing cheese in the U.S. is ½ gallon per pound of cheese. In France, it is 2 gallon perpound.

France, however, has the comparative advantage in wine production since. $\frac{a_{LW}^*}{a_{LC}^*}\left(\frac{3}{6}\right) < \frac{a_{LW}}{a_{LC}}\left(\frac{2}{1}\right)$

The cost of producing wine in France is ½ pound of cheese per gallon of wine while in the U.S., it is 2 pounds per gallon.

The production possibility frontiers for both countries are plotted on the adjoining figure. Notice that the US PPF lies outside France's PPF. Since both countries are assumed to be the same size in the example, this indicates the US absolute advantage in the production of both goods.

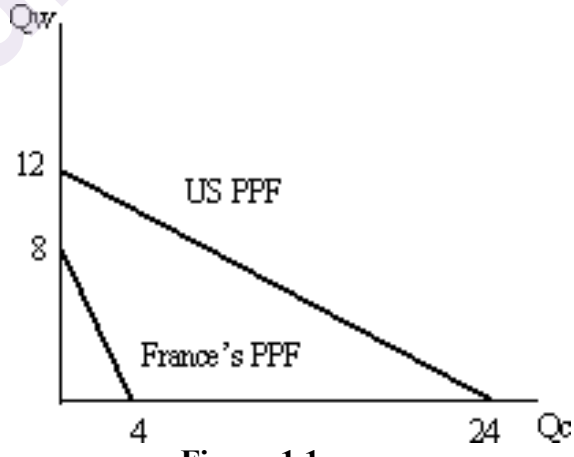

Figure 1.1

The absolute value of the slope of each PPF represents the opportunity cost of cheese production. Since the US PPF is flatter than France's this means that the opportunity cost of cheese production is lower in the US and thus indicates that the US has the comparative advantage in cheese production.

With full employment of labor, production will occur at some point on the PPF.

To see the effects of specialization and free trade we must compare it to a situation of no trade, or autarky. Thus we must construct an autarky equilibrium first. To determine the autarky production point requires some information about the consumer demand for the goods. Producers will produce whatever consumers demand at the prevailing prices such that supply of each good equals demand. In autarky this means that the production and consumption point for a country are the same.

For the purpose of this example we will simply make-up a plausible production/consumption point under autarky. Essentially we assume that consumer demands are such as to generate the chosen production point. The Table below shows the autarky production/consumption levels for the two countries. It also shows total world production for each of the goods.

Autarky Production/Consumption		
	Cheese(lbs)	Wine (gals)
US	16	4
France	3	2
World Total	19	6

Table 1.2

Autarky Production/Consumption Points

In this diagram we depict the autarky production and consumption points

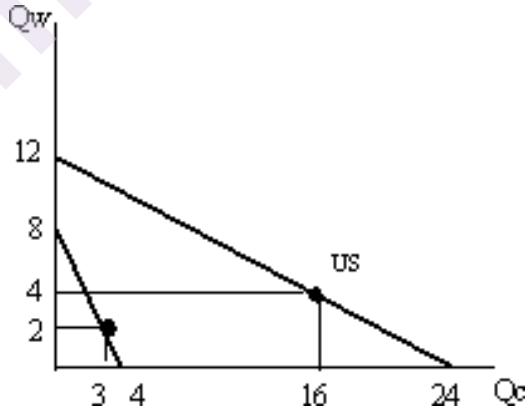

Figure 1.2

for the US and France. Each point lies on the interior section of the country's production possibility frontier.

Ricardo argued that trade gains could arise if countries first specialize in their comparative advantage good and then trade with the other country.

Specialization in the example means that the US produces only cheese and no wine, while France produces only wine and no cheese. These quantities are shown in the following Table. Also shown are the world totals for each of the goods.

Production with Specialization in the Comparative Advantage Good		
	Cheese (lbs)	Wine (gals)
US	24	0
France	0	8
WorldTotal	24	8

Table 1.3

At this point we can already see a remarkable result. When countries specialize in their comparative advantage good, world output of both wine and cheese rises. Cheese output rises from 19 to 24 pounds. Wine output rises from 6 to 8 gallons. What is more, the output increases occur without an increase in the quantity of labor used to produce them. In autarky it took 48 worker-hours to produce 19 pounds of cheese and 6 gallons of wine. With specialization, the same 48 worker-hours produce 24 cheese and 8 wine. This means that there is an increase in world productivity - more output per unit of labor. Often this productivity improvement is referred to as an **increase or improvement in world production efficiency**.

The increase in world production efficiency does not benefit the countries unless they can trade with each other after specialization. Both production points were feasible under autarky but the countries demanded some of each good. Thus, the countries will want some of each good after specialization and the only way to accomplish this is through trade. Now if the world can produce more of both goods through specialization, clearly there must be a way to divide the surplus between the two countries so that each country ends up with more of both goods after trade than they hadin autarky.

The surplus in world production amounts to 5 extra pounds of cheese and 2 extra gallons of wine. To assure that trade is advantageous for the two countries, each must have at least as much to consume of one good and more to consume of the other. Suppose we split the wine surplus equally and give 3 extra pounds of cheese to France and 2 extra pounds to the US. Since the US consumed 16 cheese and 4 wine in autarky, they would now have18 cheese and 5 wine after specialization and trade. France, which began with 3 cheese and 2 wine in autarky, would now have 6 cheese and 3 wine. Consumption and production after trade for the two countries is shown in the Table.

Consumption and Production after Trade				
	Cheese (lbs)		Wine (gals)	
	Consumption	Production	Consumption	Production
US	18	24	5	0
France	6	0	3	8
World Total	24	24	8	8

Table 1.4

For consumption of both goods to be higher in both countries trade must occur. In the example, the US is consuming 5 gallons of wine and producing none so it must import the 5 gallons from France. France is consuming 6 pounds of cheese with nocheese production so it must import the 6 pounds from the US. The terms of trade is ToT = 5 gal/6 lbs or 5/6 gal/lb.

Conclusions:

The Ricardian model numerical example assumes that countries differ in their production technologies such that one of the countries is more productive than the other in the production of each of the two goods. If these two countries specialize in their comparative advantage good then world production rises for both goods. Increased output occurs even though there is no increase in the amount of labour input in the world, thus the example demonstrates that specialization can raise world production efficiency. Because of the increase in output, it is possible to construct a terms of trade between the countries such that each country consumes more of each good with specialization and trade than was possible under autarky. Thus, both countries can gain from trade. The surprising result from this example is that a country which is technologically inferior to another in the production of all goods can nevertheless benefit from trade withthat country.

Limitations:

A numerical example can display only one possible outcome for the model. As such, all conclusions should be viewed as possibilities rather than a general result of the model. With further thought there are some problems with the example. First, it is conceivable that with a different choice for the country's autarky production/consumption points, world output might not rise for both goods upon specialization. In this case we could not be sure that both countries would gain from trade. Second, since we merely made up a terms of trade that generated the interesting conclusion, we could ask whether a favorable terms of trade is likely to arise or not. Is it possible to make up a different terms of trade such that one country enjoys all the benefits of increased production while the other is made worse off? How can we be sure that this outcome would not arise? Finally, even if the country has more of both goods after trade, can

we be sure that all consumers would have more of both goods? Perhaps some consumers would have more while other less.

The answer to some of these questions can be found by describing more carefully some of the features of the model. We must describe the relationship between prices and wages. Using these relationships, we can explain the impact of free trade on the price ratio and the effect of trade on the distribution of income.

1.12 PROF. TAUSSIG'S RESTATEMENT

Prof. Taussig said, we can easily translate 'comparative differences in labour cost of commodities into absolute differences in prices without affecting the real exchange relations between commodities. For this, let us take the following illustration:

Suppose, in country A: 1 day's labour produces 20 units of wine, and 1 day's labour produces 20 units of cloth, while in country B: 1 day's labour produces 10 units of wine, and 1 day's labour produces 15 units of cloth.

Thus, country *A* has an absolute superiority in producing both the commodities but it has a comparative advantage in wine. Hence, country *A* will specialise in wine. Country *B* has comparative advantage in cloth, so it will specialise in cloth.

In order to convert labour costs into money costs let us take daily wages into account, which we may assume to be Rs. 100 in country *A* and Rs. 80 in country *B*. Thus:

MONEY COST OF COMMODITIES			
Country	**Product of 1 day's labour**	**Daily Wage = Money cost per day's labour Rs.**	**Money Cost =Supply Price per unit of output (Rs.)**
A	**20 Units of Wine 20 Units of Cloth**	**100** **100**	**5.00** **5.00**
B	**10 Units of Wine 15 Units of Cloth**	**80** **80**	**8.00** **5.33**

Table 1.5

It is easy to see that the money cost (or price) of producing wine is lower in country *A* as compared to that in *B* (in *A* it is Rs. 5 per unit, while in *B* it is Rs. 8 per unit). In view of the Ricardian comparative cost theory, whether we compare money costs orlabour costs, it may be implied, thus,

that, country *A* will specializein the production of wine and export it to *B*. On the other hand, *B* has a relatively less disadvantage in money cost of producing cloth. Hence, *B* will specialize in the production of cloth and export it to *A*.

It may be criticised that the above result is obtained because we have arbitrarily chosen the wage rates. But the objection holds no water as under our assumption, there will always be an upper and lower limit within which the ratio of money wages between the two countries must lie. It is only the choice of one or other of the ratios within these limits which is arbitrary. But these limits to the wage rate differences are not arbitrarily chosen. They are fixed by the comparative efficiency of labour in each country.

Taussig, however, tried to defend it by saying that if we divide labour into certain groups, then within each group, we will have units of the same efficiency. This is called stratification of labour. If stratification of labour in both the countries is the same, then they must be at the same stage of economic development. But Taussig's defence is weak, because stratification of labour in different countries will not be the same since different countries are at different stages of economic and technological advancement.

1.13 MISCONCEPTION ABOUT COMPARATIVE ADVANTAGE:

The sources of the misunderstandings are easy to identify.

First, the principle of comparative advantage is clearly counter-intuitive. Many results from the formal model are contrary to simple logic.

Secondly, the theory is easy to confuse with another notion about advantageous trade, known in trade theory as the theory of absolute advantage. The logic behind absolute advantage **is** quite intuitive. This confusion between these two concepts leads many people to think that they understand comparative advantage when in fact, what they understand is absolute advantage. Finally, the theory of comparative advantage is all too often presented only inits mathematical form. Using numerical examples or diagrammatic representations are extremely useful in demonstrating the basic results and the deeper implications of the theory. However, it is also easy to see the results mathematically, without ever understanding the basic intuition of the theory.

1.14 THE PAUPER-LABOR ARGUMENT

The most interesting myth is the 'Pauper-Labor Argument': 'Foreign competition is unfair and hurts other countries if it is based on low wages.' Wolf also discusses this argument. Responding that labor is cheap if unproductive, he implies that no unfairness is inflicted on workers in industrialized countries. While Wolf disputes the argument's factual assumption, Krugman and Obstfeld try to rebut the fairness complaint

directly. They say it does not matter what causes lower production costs abroad. What matters for the importing country is that it is cheaper in terms of *its* labor to produce some goods and exchange them for others, rather than to produce everything, regardless of why those are cheaper abroad. What they seem to be saying is that countries trade because production costs differ. Drawing on this notion as a rebuttal of fairness complaints, they seem to endorse the Strong Westphalian View. How others determine social costs is none of 'our' business. We need not be concerned with how others treat their workers, nor can our workers complain on such grounds.

This is a conditional argument: if legislation of social standards rests on moral reasons, *then* consistency considerations (considerations exploring what is entailed by the fact that standards hold for moral reasons) deliver the conclusion that domestic industries may deserve compensation. Yet as a factual claim about legislation, this view is often false. Consider an excerpt from the 1930 US Tariff Act: All goods, wares, articles, and merchandise mined, produced, or manufactured wholly or in part in any foreign country by convict labor or/and forced labor or/and indentured labor under penal sanctions shall not be entitled to entry at any of the ports of the United States, and the importation thereof is hereby prohibited but in no case shall such provisions be applicable to goods, wares, articles, or merchandise so mined, produced, or manufactured which are not mined, produced, or manufactured in such quantities in the United States as to meet the consumptive demands of the United States.

In the view that a country loses by importing from another country that has low wages presumably by lowering wages at home. This view ignores the fact that low wages are due to low productivity, and that the high-wage home country, with high productivity, will have comparative advantage in some products and will gain from trade.

1.15 SUMMARY

1. International trade involves across border exchange and this increases the cost of trading. Factors like tariffs, restrictions, time costs and costs related with legal systems of the countries involved in trade make the international trade a costly affair.

2. The international trade models attempt to analyze the pattern of international trade and suggest ways to maximize the gains from trade.

3. The best-known of the resulting models, the Heckscher-Ohlin theorem (H-O) depends upon the assumptions of no international differences of technology, productivity, or consumer preferences; no obstacles to pure competition or free trade and no scale economies. The resulting theorem states that, on those assumptions, a country with a relative abundance of capital would export capital-intensive productsand import labour-intensive products.

4. Modern trade theory explores the effects upon trade of a range of factors, including technology and scale economies. It makes extensive use of *econometrics* to identify from the available statistics, the contribution of particular factors among the many different factors that affect trade.

5. A country has a comparative advantage in the production of a good if it can produce that good at a lower opportunity cost relative to another country – Ricardo.

6. Prof. Taussig said, we can easily translate 'comparativedifferences in labour cost of commodities into absolute differences in prices without affecting the real exchangerelations between commodities.

1.16 QUESTIONS

1. Define and explain International trade.
2. Differentiate between Classical view and Modern view of International trade.
3. Explain the importance of foreign trade.
4. Discuss the benefits of foreign trade.
5. Discuss in detail Ricardian Theory of Comparative CostAdvantage.
6. Write note on: Pauper Labour Argument

2

FACTOR ENDOWMENT THEORY OF INTERNATIONAL TRADE

Unit Structure:

2.0 OBJECTIVES

- To study the H-O model of international trade.
- To study the Factor endowment theory of international trade.
- To study the assumptions, explaination, merits and drawbacks of H-O thesis.
- To study the empirical evidence on H-O model.
- To study what is Leontief's paradox.

2.1 INTRODUCTION

The Heckscher-Ohlin (H-O hereafter) model was first conceived by two Swedish economists, Eli Heckscher (1919) and Bertil Ohlin. Rudimentary concepts were further developed and added later by Paul Samuelson and Ronald Jones among others.

There are four major components of the H-O model:

1. Factor Price Equalization Theorem,
2. Stolper-Samuelson Theorem,
3. Rybenzynski Theorem, and
4. Heckscher-Ohlin Trade Theorem.

Due to the difficulty of predicting the goods trade pattern in a world of many goods, instead of the Heckscher-Ohlin Theorem, the Heckscher-Ohlin-Vanek Theorem that predicts the factor content of trade received attention in recent years. **Eli Heckscher**(1879 - 1952) Heckscher was a Swedish economist. He is probably best known for his book "Mercantilist." Although his major interest was in studying economic history, he also developed the essentials of the factor endowment theory of international trade in a shortarticle in Swedish in 1919. It was translated into English thirty years later. **Bertil Ohlin** (1899-1979) Heckscher's student, Bertil Ohlin developed and elaborated the factor endowment theory. He was not only a professor of economics at Stockholm, but also a major political figure in Sweden. He served in **Riksdag** (Swedish Parliament), was the head of liberal party for almost a 1/4 of a century. He was Minister of Trade during World War II. In 1979 Ohlin was awarded a Nobel prize jointly with **James Meade** for his work in international trade theory.

HO Model = 2 × 2 × 2 model (2 countries, 2 commodities, 2 factors)

For example, there are two countries (America and Britain); each country is endowed with 2 homogeneous factors (labor and capital) and produces 2 commodities.

This is the smallest case of "*even*" model, i.e., the number of commodities is equal to that of factors. Extending the model to a more general case is not easy. In fact, the results obtained from a more general model do not have the clear, common sense interpretations which the simple HO model enjoys.

2.2 FACTOR ENDOWMENT THEORY OF INTERNATIONAL TRADE

According to the factor endowment theory, a country with a relatively cheaper cost of labour would export labour-intensive products, while a country where the labour is scarce and capital is relatively abundant would export capital-intensive goods. Wassily Leontief carried out an empirical test of the Heckscher-Ohlin Model in 1951 to find out whether or not the US, which has abundant capital resources, exports capital-intensive goods and imports labour-intensive goods. He found that the US exported more labour-intensive commodities and imported more capital-intensive.

Heckscher (1919) and Bertil Ohlin (1933) developed a theory to explain the reasons for differences in relative commodity prices and competitive advantage between two nations. According to this theory, a nation will export the commodity whose production requires intensive use of the nation's relatively abundant and cheap factors and import the commodity whose production requires intensive use of the nation's scarce and expensive factors. Thus, a country with an abundance of cheap labour would export labour- intensive products and import capital-intensive goods and vice versa. It suggests that the patterns of trade are determined by factor endowment rather than productivity. The theory suggests three types of relationships, which are discussed here.

Land-labour relationship

A country would specialize in production of labour intensive goods if the labour is in abundance (i.e., relatively cheaper) ascompared to the cost of land (i.e., relatively costly). This is mainly due to the ability of a labour-abundant country to produce something more cost-efficiently as compared to a country where labour is scarcely available and therefore expensive.

Labour-capital relationship

In countries where the capital is abundantly available and labour is relatively scarce (therefore most costly), there would be a tendency to achieve competitiveness in the production of goodsrequiring large capital investments.

Technological complexities

As the same product can be produced by acopting various methods or technologies of production, its cost competitiveness would have great variations. In order to minimize the cost of production and achieve cost competitiveness, one has to examine the optimum way of production in view of technological capabilities and constraints of a country.

2.3 HECKSCHER-OHLIN THESIS

Bertil Ohlin and Eli Heckscher have explained the basis of international trade in terms of factor endowments. The classical theory demonstrated that the basis of international trade was the comparative cost difference. However, it did not explain the causes of such comparative cost difference. The alternative formulation-of the **comparative** cost doctrine developed by Heckscher and Ohlin explains why comparative cost differences exist internationally.

They attribute international (and inter-regional) differences in comparative costs to:

(a) Different prevailing endowments of the factors of production;and

(b) The fact that the production of various commodities requiresthat the factors of production be used with different degrees ofintensity.

In short, it is the difference in factor intensities in the production functions of goods along with the actual differences in relative factor endowments of the countries which explains the international differences in the comparative cost of production.

Thus, in a nutshell, the Heckscher-Qhlin theory states that a country will specialise in the production and export of the goods whose production requires a relatively large amount of the factorwith which the country is relatively well endowed with capital only if the ratio of capital to other factors is higher than in other countries. For example, assume that:

(i) In Country A:	
Supply of labour	=25 onits
Supply of capital	=20 units
Capital/labour ratio	= 0.8
(ii) In Country B:	
Supply of labour	=12 units
Supply of capital	=15 onits
Capital/labour ratio	= 1.25

In the above example, even though Country A has more capital in absolute terms, Country B is more richly endowed with capital because the ratio of capital to labour in Country A (0.8) is lower than in Country B (1.25).

The *two-country, two-commodity* model of Heckscher and Ohlin is based on a number of explicit and implicit assumptions. The important assumptions of the model are:

(i) Both the product and factor markets in both the countries are characterised by perfect competition.

(ii) The factors of production are perfectly mobile within each country but immobile between countries.

(iii) The factors of production are of identical quality in both the countries.

(iv) Factor supplies in each country are fixed.

(v) The factors of production are fully employed in both thecountries.

(vi) The factor endowments of one country vary from those of the other.

(vii) There is free trade between the countries, i.e., there are noartificial barriers to trade.

(viii) International trade is costless, i.e., there is no transport cost.

(ix) The techniques of producing indentical goods are the samein both the countries. Because of this act, the same input mix will give the same quantity and quality of output in both the countries.

(x) Factor intensity varies between goods. For instance, some goods are capital intensive (i.e., they require relatively more capital for their production) and some others are labour intensive (i.e., they require relatively more labour for their production.

(xi) Production is subject to the *law of constant returns, i. e.,* the input/ output ratio will remain constant irrespective of the scale of operations.

Most of the above assumptions are, obviously, unrealistic. The Heckscher-Ohlin model has been criticised mainly for its oversimplifying and unrealistic assumptions.

Wassily W. Leontief s study has revealed that the USA, whichis a capital rich country, imported capital intensive goods arid exported labour intensive goods. This has come to be popularly known as the *Leontief Paradox,* which is a negation of the Heckscher-Ohlin thesis. It should, however, be pointed out that Leontief's study has been criticised as unscientific.

Despite its drawbacks, the Heckscher-Ohlin theory has certain definite merits. These are:

(i) The Heckscher-Ohlin theory rightly points out that the immediate basis of international trade is the differences in the final price of a commodity as between countries, although the actual basis or ultimate cause of trade is the comparative cost differences in production. Thus, it provides a more comprehensive and satisfactory explanation for the existence of international trade.

(ii) The Heckscher-Ohlin theory is superior to the Comparative Cost theory in some other respects also. The Ricardian theory points out that comparative cost difference is the basis of international trade; but it does not explain the reasons for the existence of comparative cost differences between nations. The Heckcsher-Ohlin theory explains the reasons for the differences in the cost of production in terms of the differences in factor endowments. This is another aspect of the Heckscher-Ohlin analysis that makes it superior to the Ricardian analysis.

(iii) Further, Heckscher and Ohlin made it very clear that "international trade is but a special case of inter-local or inter- regional trade", and hence there is no need for a special theory of international trade. Ohlin states that regions and nations trade with each other for the same reasons that individuals specialise and trade. The comparative cost difference is the basis of all trade-inter- regional as well as international. Nations, according to Ohlin, are only regions distinguished from one another by such obvious marks as national frontiers, tariff barriers and differences in languages, customs *and monetary systems*.

The modern theory of trade is also called the *General Equilibrium Theory* of international trade because it points out that the general demand and supply analysis applicable to inter-regional trade may generally be used without substantial changes in dealing with problems of international trade.

(iv) Another merit of the Heckscher: Ohlin theory indicates the impact of trade on product and factor prices.

The Heckscher-Ohlin theory indicates that international trade will ultimately have the following results:

(a) Equalisation of Commodity Prices: International trade tends to equalise the prices of internationally traded goods in all the regions of the world because trade causes the movement of commodities from areas where they are abundant to areas where they are scarce. This would tend to increase commodity prices where there is abundance and decrease prices where there is scarcity by reason of redistribution of commodity supply between these two regions as a result of trade. International trade tends to expand up to the point where prices in all the regions become equal. But perfect equality of prices can hardly be achieved because of the existence of transport costs and the absence of free trade and perfect competition.

(b) Equalisation of Factor Prices: International trade also tends to equalise factor prices all over the world. It increases the demand for abundant factors (leading to an increase in their prices) and decreases the demand for scarce factors (leading to a fall in their prices) because, when nations are on trade, specialisation takes place on the basis of factor endowments. But, in reality, the presence of a number of imperfections make the achievement of perfect equality in factor prices impossible.

Check Your Progress:

1. State the four major components of H-O model.
2. Discuss the assumptions of H-O model.
3. Explain the merits of H-O model.

2.4 EMPIRICAL EVIDENCE ON HECKSCHER-OHLIN MODEL

Leontieff (1954) used 1947 U.S. input-output tables to estimate the factor-intensity of U.S. exports and 'import replacements. He found that, contrary to theoretical expectations, U.S. exports were more labor-intensive and less capital-intensive than U.S. exports.

Conclusion: the evidence appeared to contradict the predictions of the theorem.

Vanek (1959) found the natural resource content of U.S. exports was approximately one-half that of U.S. imports. He suggested that capital and natural resources were, to some degree, complementary in U.S. trade, so that U.S. importation of natural resources were, to some degree, that U.S. imports were relatively capital-intensive.

Conclusion: natural resources should be excluded from any test of the theory

Minhas (1963) found evidence that factor intensity reversals was fairly prevalent. He studied 24 industries in 19 countries and found factor-intensity reversals in five cases. A bilateral comparison of 20 industries in the US and Japan found a low correlation in capital- labour ratios between the two countries.

Conclusion: factor-intensity reversal is not uncommon, in which case relative factor endowments may fail to predict patterns of trade.

Kenen (1964) made the first attempt to include human capital. It was estimated for U.S. exports and imports and added to physical capital requirements. Using 1947 data, he found that, even including natural resource-based products, the paradox was eliminated.

Conclusion: if capital is broadened to include human capital, the evidence appears to support the theory for U.S. trade.

Keesing (1966) found that U.S. exports were more skill-intensive than the exports of nine other industrial countries for the year 1957. Conclusion: the inclusion of human capital shows U.S. exports to be relatively capital-intensive

Badwin (1971) examined the factor content of U.S. trade for 1962, using a wider range of factors and distinguishing between physical and human capital. He found that the inclusion of human capital significantly weakened the Leontieff Paradox, but was not sufficient to reverse it. He also found that the exclusion of natural resource- based products almost eliminated the paradox.

Conclusion: the inclusion of a wider range of factors achievers a better results, but still fails to confirm the theory.

Leamer (1980) adopted a different approach by comparing thecapital-to-labour ratio is U.S. production with U.S. consumption rather than U.S. exports compared with imports. He found that the capital-labour ratio was indeed higher in U.S. production than U.S. consumption and concluded that there was, therefore, no paradox. Conclusion: the use of a different methodology gives a different result.

Stern and Maskus (1981) also incorporated human capital using a single measure based on rates of pay as reflecting the skill of the labour involved. They found that the paradox remained for U.S. trade in 1958, but disappeared in 1972. They also estimated the factor content of production and consumption to be equal for all three factors used.

Conclusion: the inclusion of human capital eliminates the paradox, but leaves the theory saying very little.

Havrylyshyn (1984) tested the Heckscher-Ohlin theory for a sample of trade between developed and developing countries (i.e. North-South trade). He found that the exports of developing countries to developed countries were less captial-intensive than their imports including both physical and human capital.

Conclusion: The Heckscher-Ohlin works better in predicting trade patterns between developed and developing countries.

Bowen, Leamer and Sviekauskas (1987) used data for 27 countries to see how well relative factor abundance predicted actual patterns of trade. Data for 12 factors were used. Relative factor abundance was measured by the share of different factors in a country's national income (factor income) and factor intensities by the factor content of exports and imports.

They found that, for two- thirds of the factors, trade flows ran in the direction predicted less than 70% of the time.

Conclusion: the empirical evidence fails to provide support for the Heckscher-Ohlin theory.

2.5 THE LEONTIEFF'S PARADOX

One of the attractions of the HO theory is that it provides us with set of simple and readily testable predictions. One of the first attempts made to test the theory was made by a Russian-born economist, Wassily Leontieff (b.1906) in 1954. Using the 1947 input-output tables for the United States, he sought to test the proposition that the US had a comparative advantage in capital- intensive goods and therefore traded these goods for imported labour-intensive products. Leontieff measured the factor intensity of U.S. exports and *import replacements* using the input-output tables. The reason for taking import replacements (U.S. produced goods that are substitutes for goods imported) rather than imports was that information about factor intensities could not be obtained for all the products which the US imported or for all the countries from whom she imported. If the factor intensities for these products are the same in other countries, the use of import replacements need pose no major problems. Interestingly, Leontieff's results showed that U.S. imports were more capital-intensive than U.S. exports, the exact opposite of what the theory predicted (Leontieff, 1954)!

The *Leontieff Paradox,* as it came to be known, seemed to prove that the HO theory was wrong. Subsequently, a variety of explanations were put forward for Leontieff's results.

1. One possible explanation was that the year chosen. 1947, wasnot very representative given that trading patterns may still have been - distorted by the ending of the Second World War. However, attempts to carry out the same test for later years reproduced the same result and thus appear to refute the explanation (Leontieff, 1956).

2. A second explanation focused on the use of import replacements rather than imports. If products imported by the US were producedby different methods in other countries to those adopted in the US, factor intensities will differ and the use of import replacements as *a* proxy for imports will render the, theory invalid. Specifically, it is possible, given the scarcity of labour in the US, that goods that are produced by labour-intensive methods abroad, are produced by capital intensive methods in the US. This is known as *factor- intensity reversal* (Ellsworth, 1954) The important question is: to what extent does factor-intensity reversal occur in reality) and is it of sufficient importance to render the HO theory invalid? If factor- intensity reversal is a common occurrence then the HO assumption that all countries face identical production functions for the same good is not valid and the theory breaks down. Empirical research his established that factor-intensity reversal does, indeed, take place (Minhas 1963). However, it appears that, in most cases, it is not

sufficient to account for the result obtained by Leontieff. (See Leontieff 1964, Moroaey, 1967, Bhagwati, 1969.)

3. A third explanation is that the assumption of identical consumer preferences is invalid. Specifically, it was argued that, in 1947, on account of their higher per capita income; U.S. consumers had a greater preference for capital-intensive goods. Higher quality consumer goods are generally more capital-intensive than lower quality ones (see Houthakker, 1957).

4. The explanation preferred by Leontieff was that U.S. labour Was superior to that of other countries. Quite arbitrarily, he gave a figure of three to one as the difference between the efficiency of U.S.labour and that of- other countries. In that case, labour could not be described as relatively scarce and the fact that U.S. exports were more labour-intensive than U.S. imports was hardly surprising. The main problem with this argument is that it is by no means apparent why this hold be true of labor alone. There is every reason to suppose that U.S. capital was also more productive than that of other countries, in which case the capital-labour ratio would be unaffected and the presumption that labour was relatively scarce would still hold. No empirical evidence has been forthcoming to contradict this.

5. A further explanation has emphasised the failure of Leontieff to distinguish human from physical capital. Human capital finds its embodiment in the skills and education of a country's labour force. If allowance is made for this, it would be the case that U.S. exports are more capital-intensive than Leontieff found. In a later work, Leontieff himself found that the average level of skill of the labour force in the U.S. was higher in the export than the import replacements sector (Leontieff, 1956). Subsequently, Kenen (1965) has shown that, once human capital is included, the Leontieff Paradox is reversed but only just. On the other hand, using a different method of estimating human capital, Baldwin (1971) found that, while the inclusion of human capital was sufficient to weaken the Paradox, it was' not enough to reverse it. In fact, since physical and human capital are hardly perfectly substitutes, it is more appropriate to treat human capital as a separate factor of produc- tion. Since human capital and not capital in aggregate is most probably the United States' most abundant factor of production, the right test to perform is to measure the relative human capital intensity of U.S. exports.

6. The next explanation concerns natural resources that are moitted as a factor from the model used by Leontieff. The HO model becomes more complex if a third factor of production is introduced. Attention was drawn to the fact that, on account of her rapid industrialisation, the US had become relatively deficient in natural

7. resources such that much of what she imported consisted of resource-intensive goods. The possibility, therefore, existed that natural resources and not labour were her relatively most scarce factor. Therefore, the US had become an exporter of both capital- and labour-intensive goods in exchange for resource-intensive goods. In a later

study, Leontieff excluded certain resource imports which were non competitive with U.S. production (i.e. they could not be produced anywhere in the US) and found that the original Paradox disappeared. Work by Vanek (1963) confirmed that U.S. imports were more resource-intensive than her exports. He alsofound some evidence that capital and natural resources were complementary in U.S. imports but not in U.S. exports. If so, this would impart a capital-intensive bias to U.S. imports.

2.6 SUMMARY

1. Heckscher and Ohlin developed a theory to explain the reasons for differences in relative commodity prices and competitive advantage between two nations. According to this theory, a nation will export the commodity whose production requires intensive use of the nation's relatively abundant and cheap factors and import the commodity whose production requires intensive use of the nation's scares and expensive factors.
2. The H-O model has been criticized mainly for its oversimplifying and unrealistic assumptions.
3. The H-O theory indicates that international trade will ultimately have the following results:

i) International trade tends to equalize the prices of internationally traded goods in all the regions of the world,

ii) It tends to equalize factor prices all over the world.

4. Leontiff tested the H-O theory by using input-output tables for the United States. Interestingly, his results showed that U.S. imports were more capital-intensive than U.S. exports, the exact opposite of what the theory predicted.

2.7 QUESTIONS

1. Critically examine 2 countries x 2 commodities x 2 factors modelof international trade.
2. Examine the empirical evidence on H-O model.
3. Write a note on Leontief's paradox.

3

GAINS FROM INTERNATIONAL TRADE

Unit Structure:

3.0 OBJECTIVES

- To study various types of Terms of Trade and its limitations
- To understand Gains from International Trade concept
- To study the evaluation of the Theory of Reciprocal demand
- To understand the Offer curves approach

3.1 TERMS OF TRADE: TYPES AND LIMITATIONS

Terms of trade is the rate at which one country's goods are exchange with another country's goods. It determines the prices of the goods traded in foreign market. It expresses relationship between export prices and import prices of a country. When a country's export prices are more than its import prices, then it is favourable to the country. Since its export prices are more than export prices it can obtain more quantity of imports. So there is a gain for the country. A country's terms of trade said to be unfavourable when its export prices are less than its import prices i.e. it can obtain a small quantity of imports with its export prices or has to pay more import prices.

Let us discuss the concept with the help of an example. Suppose

	Country A		Country B	
	Corn (in tonnes)	Rice (in tonnes)	Corn (in tonnes)	Rice (in tonnes)
Production	1000	800	100	300
Consumption	300	1000	700	100
Surplus/Deficit	700 (surplus)	200 (deficit)	600 (deficit)	200 (surplus)
Total	700 – 200 = 500 (surplus)		- 600 + 200 = -400 (deficit)	

Prices are assumed to be equal in this example. The nation with a surplus stock is capable to meet its needs. In other words, there is a positive cash flow and more capital is produced from exports than imports or Terms of Trade is favourable to Country A.

3.2 TYPES OF TERMS OF TRADE (TOT)

1. Net Barter Terms of Trade:

It is also called as Commodity Terms of Trade. It is used to understand the overall view of the changes in the country's trading in a better way. It is calculated as a ratio between a country's import and export prices i.e.as the percentage ratio of the export unit value indexes to the import unit value indexes, measured relative to the base year. It is mathematically represented as,

$T_0 = Px / Pm$

$T_0 \rightarrow$ Commodity terms of trade

P → Prices and x and m → exports and imports

2. Gross Barter Terms of Trade:

Gross Barter Terms of Trade is the ratio of total physical quantity of import to total physical quantity of export of a given country. In symbolic terms:

$T_G = Qm / Qx$

$T_G \rightarrow$ Gross barter terms of trade

Qm → Total physical quantity of imports

Qx → Total physical quantity of exports

A higher value of T_G indicate that the given country can import more units of goods and services from abroad for the given units of exports.

3. Income Terms of Trade:

Income Terms of Trade is defined as- commodity TOT multiplied by quantity of export. Symbolically, income terms of trade can be written as:

$Ty = (Px / Pm) Qx$ or $Px \times Qx / Pm$

Ty → Income terms of trade

Px → Price of exports

Qx → Volume of exports

Pm → Price of imports

Income Terms of Trade can increase through an increase in export prices i.e. when there is rise in exports, and a decrease in import prices. It is therefore used to measure a country's capacity to import.

4. Single factor Terms of Trade:

Single factor Terms of Trade is found by multiplying Net Barter Terms of Trade with productivity index of domestic export sector. Symbolically, Single factor Terms of Trade can be written as:

$Ts = (Px / Pm) Zx$

Ts → Income terms of trade

Px → Price of exports

Pm → Price of imports

Zx → Productivity index of domestic export sector

It is the net barter terms of trade corrected for changes in the productivity of export goods.

5. Double Factorial Terms of Trade:

Double Factorial Terms of Trade is calculated by multiplying Net Barter Terms of Trade with the ratio of factor productivity of domestic industry and foreign export industry. Symbolically, Double Factorial Terms of Trade can be written as:

$T_D = T_C (Zx / Zm)$

T_D → Double Factorial Terms of Trade

T_C → Net Barter Terms of Trade / Commodity Terms of Trade

Zx → Productivity index in the domestic export sector

Zm → Import productivity index / Productivity index in the foreign country's export sector

It expresses the change in the productivity of both the domestic export industry and the export industries of the foreign countries selected.

6. Real Cost Terms of Trade:

In case of an increase in export production drives resources are taken away from the other sectors of the economy to the export sector. In other words, some common resources can be used by the export sector and also the other sectors of the economy. But since these resources are used to increase production of export the same cannot be used in other sectors of the economy. Since these resources are sacrificed by the other sectors to increase the export production, it involves some amount of disutility or sacrifice. The amount of resources allocated elsewhere or utility cost per unit of resources employed in the production of export goods is considered

to be the real cost terms of trade or the opportunity of exporting a good into the exports production.

Real Cost Terms of Trade is measured by multiplying the single factor Term of Trade by the index of the amount of disutility. It is mathematically represented as:

$Tr = Ts \times Rx$

Tr → Real Cost Terms of Trade

Ts → Single factor Terms of Trade

Rx → disutility or real cost in producing export goods

7. Utility Terms of Trade:

Utility Terms of Trade measures the changes in the disutility or dissatisfaction of producing a unit of exports. It also measures the changes in the satisfactions arising imports and the indigenous products wasted to produce those exports. In other words, it calculated the changes in the Real cost ToT in terms of the utilities wasted.

It is therefore calculated by multiplying the real cost terms of trade index with an index of the relative average utility of imports and of domestic commodities foregone. It is mathematically represented as:

$Tu = Tr \times U$

Tu → Utility Terms of Trade

Tr → Real cost terms of trade index

U → Index of relative utility of imports and domestically foregone commodities

3.2.1 Limitations of Terms of Trade

1. Problem of Index Numbers:

All types of terms of uses index number to measure the variations in the prices of goods and services in different countries at different time. Many time it becomes difficult to associate with the index numbers in terms of its coverage, base year, and method of calculation.

2. Change in Quality of Product:

All types of terms of trade are based on the index numbers of export and import prices of goods and services in participating countries. It fails to take into consideration the changes taking place in the quality and composition of goods entering trade between these countries. Generally, terms of trade index show changes in the relative prices of goods exported and imported in the base year. So, it fails to consider large changes in the quality of goods that are taking place in the world, as also new goods that are constantly entering in international trade.

3. Problem of Selection of Period:

Terms of trade compare the changes in prices during a certain period between the trading countries. The problem is about the selecting of this period. In case of selected period, if it is too short then no meaningful change may be found between the base and the present time. If the period is too long then there may be structural changes could have been taken place in the trading countries and therefore export and import commodity content could not be compared.

4. Neglect of Import Capacity of a country:

The concept of terms of trade throws neglected capacity to import of a participating country. In case of low terms of trade in India, with a given quantity of Indian exports a smaller quantity of imports than before is possible. If India's export rises, may be due to fall in the prices of exports then it may lead to either increase of import capacity or it may remain unchanged.

5. Not Helpful in Balance of Payment Disequilibrium:

The concept of terms of trade is applicable only if the balance of payments of a country includes export and imports of goods and services. If the balance of payments includes unilateral payments or unrequired exports and or/imports, such as gifts, remittances from and to the other country leading to disequilibrium in the balance of payments, then the concept of terms of trade is not helpful in measuring the gains from trade.

6. Ignores distribution of Gains from Trade between countries:

The concept of terms of trade fails to explain the distribution of gains from trade between participating countries such as developed and developing country. If the export price index of a developing country rises more than its import price index, it means an improvement in its terms of trade. But if there is an equivalent rise in profits of foreign investments, there may not be any gain from trade.

3.3 GAINS FROM INTERNATIONAL TRADE

International trade brings out several benefits to the trading countries. As put forth in the comparative cost doctrine, if countries produce on the basis of their specialization, then each country will make optimum use of their resources by adding into their total output and income.

(a) Optimum use of natural resources:

Natural resources are scarce and having several uses. If we don't use them optimally then they will exhaust soon and there won't be maximum production. Therefore, a prudent and careful use of the resources is essential. International Trade makes the optimum use of these scarce resources possible due to the comparative cost advantage in practice. When a country produces a commodity at a lower cost than other countries, it means it is using the existing resources carefully to produce

more. In this way 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 so that wastage of resources will be avoided.

(b) Availability of all types of goods:

Due to scarcity of resources, it is not possible for the countries to produce all types of goods in required quantities at a lower price. But international trade made it possible to avail all types of goods by importing from the other countries.

(c) Specialisation:

International trade leads to specialisation. So, it encourages production of different goods in different countries on the basis of their specialisation. Goods can be produced at a comparatively low cost due to advantages of division of labour.

(d) Advantages of large-scale production:

In the absence of international trade countries used to produce for domestic consumption in limited quantity. In international trade countries produce goods not only for domestic consumption but also for export purpose i.e. to meet the demand of foreign consumers at large. It therefore increases their total production where goods are produced in large scale. So the benefits of large scale production are enjoyed by all the participatory countries in international trade.

(e) Establishment of new industries and technology transfer:

In international trade countries are encouraged to establish new industries with imported machinery, equipment and technical know-how from the industrially advanced countries. This helps in the rapid economic development of the underdeveloped and developing countries.

(f) Increase in efficiency:

In international market, participating countries attempt to produce better quality goods at minimum possible cost due to stiff competition between the countries. It leads to increase in overall efficiency and benefits to the consumers.

(g) Development of transport and communication facilities:

With the establishment of new industries and increase in large scale production, transportation and communication facilities also developed rapidly due to international trade.

(h) International co-operation and understanding:

For successful international trade, cooperation and understanding between people of different countries is required. Interaction and exchange of ideas on regular basis leads to cordial relations between participant countries. It is beneficial to maintain international peace.

3.4 THEORY OF RECIPROCAL DEMAND

The idea of Reciprocal demand was presented by John Stuart Mill in1873 and then it was further developed by Alfred Marshall. Reciprocal demand means the relative strength and elasticity of demand of the two trading countries for each other's product in terms of their own product. The theory advocated that the actual price at which trade takes place between two countries depends on the trading countries interacting demands. It works similarly as the demand and supply of goods and services in any other market. If demand does not equal to supply in the international market, the international price will change until it becomes equal. Thus, equalization of terms of trade depends on the demand and supply conditions for goods and services in the international market. So the equilibrium terms of trade is determined by the equation of reciprocal demand. A stable ratio of exchange is therefore determined by the equilibrium value of imports and exports of each country.

Theory of reciprocal demand is based on the following assumptions-

(i) Full employment conditions – it assumed that all the resources are fully employed.
(ii) Perfect competition – exists in the international market.
(iii) Free foreign trade – it assumed no restrictions are imposed on foreign trade.
(iv) Free mobility of factors – all the factors of production are mobile.
(v) Applicability of the theory of comparative cost – the trade between the two countries is based on the theory of comparative cost i.e. production based on specialization.
(vi) Two country, two commodity model – it assumed for simplicity that the trade takes place between two countries and related to two commodities.

Changes in Demand and Supply Conditions:

The theory of reciprocal demand analysed the impact of changes in supply and demand conditions on the terms of trade.

A. Changes in Supply Conditions:

Supply conditions changes due to several causes such as cost-reducing improvements in technology which bring changes in terms of trade. For e.g. an improvement in the textile industry in England increases the productivity due to which cloth will be cheaper in terms of India's wheat i.e. the same amount of wheat is exchanged for more cloth. It thus makes the terms of trade in favour of India's importer of cloth in exchange for wheat.

B. Changes in Demand Conditions:

The extent to which the barter terms of trade change depend on the increased production in exporting country. It also depends on the

importing country's elasticity of demand for imports in terms of its exports. In our example suppose,

(i) If elasticity of demand for England's cloth in terms of India's own wheat is more elastic (e 1), then the barter terms of trade will change in favour of India. It can be more than the fall in price of cloth in terms of wheat.

(ii) In case of unitary elastic demand (e = 1), the barter terms of trade turn in favour of India which is equal to the fall in the price of cloth in terms of wheat.

(iii) If elasticity of India's demand for cloth in terms of wheat is less elastic (e 1), then the barter terms of trade will change in favour of India less than the fall in the price of cloth in terms of wheat.

Measurement of Reciprocal Demand Elasticity:

The reciprocal demand elasticity refers to the ratio of proportional change in the quantity of imports demanded to the proportional change in the price of exports relative to the price of imports. Thus, elasticity of reciprocal demand-

$$= \frac{\text{(Percentage change in imports)}}{\left(\frac{\text{percentage change in price of export}}{\text{percentage change in price of imports}}\right)}$$

$$e = \frac{(\%\ \Delta M)}{\left(\frac{\%\ \Delta P_x}{\%\ \Delta P_m}\right)}$$

where, e = Elasticity of reciprocal demand
ΔM = Change in quantity of imports
ΔP_x = Change in price of exports
ΔP_m = Change in price of imports

Where e → elasticity of reciprocal demand

Δ M → change in quantity of imports

Δ P_x→ change in price of exports

Δ Pm → change in quantity of imports

Criticism of the Mill's Theory of Reciprocal Demand:

The theory of reciprocal demand has been criticised on the following grounds:

(i) The very first point of criticism is that the theory is based on unrealistic assumptions such as perfect competition and full employment.

(ii) In reality, actual trade is not restricted to two country, two commodity model but between many countries and many commodities.

(iii) Mill theory concentrates on the aspect of elasticity of demand, and thus neglected the impact of elasticity of supply. According to the modem economists, terms of trade (ToT) are generally influenced by elasticity of demand for exports and imports, elasticity of supply of exports, and imports.

(iv) Graham has criticised the reciprocal demand aspect of Mill's theory by stating that it has exaggerated the role of reciprocal demand and neglected the comparative cost conditions in determining the terms of trade.

3.5 OFFER CURVES APPROACH

The offer curves approach is a geometrical technique which uses graphical representation to determine the equilibrium terms of trade. This technique is developed by Marshall. Offer curve is a demand curve which shows the demand for one commodity in terms of the supply of another commodity. Generally, it is the demand for import of one commodity in terms of the supply of export of another commodity.

Let us assume that India and England, these two countries are trading partners. India produces only wheat and England only cloth. In the following diagram, India's offer curve is presented as OI. It indicates India's demand for cloth in terms of wheat. It represents the quantities of wheat which India is willing to offer in exchange for England's cloth. India is willing to offer less and less amount of wheat in exchange for more and more quantity of cloth. It is seen in the figure that for KW quantity of cloth India is willing to offer OW quantity of wheat.

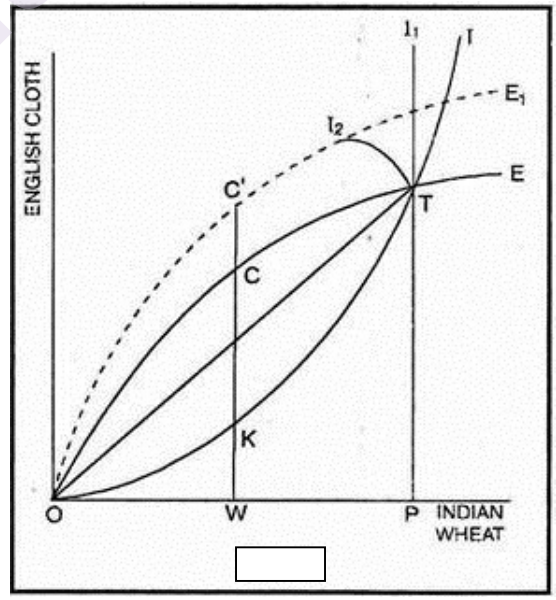

Fig 3.1

England's offer curve is represented as OE in the diagram which represents the quantity of cloth England is willing to offer in exchange of India's wheat. As it is seen in the diagram England is willing to offer CW quantity of cloth for OW quantity of wheat to India. T is the equilibrium point where OIand OE i.e. offer curves of India and England respectively intersect. The reciprocal demand at this point is equal thereby TP quantity of England's cloth is exchanged for OP quantity of India's wheat. Line OT represents terms of trade (ToT) line between two countries.

Effect of Change in Supply:

Due to improvement in technology if cost of producing cloth in England reduces then offer curve of England will shift to the left and OE_1 is England's new offer curve. With this shift now England is willing to offer C^1W cloth for OW wheat, i.e. more cloth by C^1C for same quantity of OW wheat. The terms of trade (ToT) change is in favour of India as a result of this improvement.

Effect of Change in Demand:

The extent of change in terms of trade is also depend upon the slope of India's offer curve. India's offer curve slopes positively after point T. Thus TI represents India's more elastic demand for cloth in terms of wheat. It makes the terms of trade in favour of India more than the fall in cloth's price in terms of wheat.

Suppose India's offer curve becomes a vertical straight line after point T (i.e., TI_1), then it shows unitary elastic demand for cloth in terms of wheat and the terms of trade (ToT) will change in favour of India equal to the fall in cloth price in terms of wheat. And if India's offer curve slopes backward then after point T (i.e., TI_2), the terms of trade (ToT) will change in favour of India more than the fall in price of doth relative to wheat.

3.6 SUMMARY

1. Terms of trade is the rate at which one country's goods are exchange with another country's goods. It determines the prices of the goods traded in foreign market. It expresses relationship between export prices and import prices of a country.

2. International trade brings out several benefits to the trading countries. As put forth in the comparative cost doctrine, if countries produce on the basis of their specialization then each country will make optimum use of their resources by adding into their total output and income.

3. Reciprocal demand means the relative strength and elasticity of demand of the two trading countries for each other's product in terms of their own product. The theory advocated that the actual price at which trade takes place between two countries depends on the trading countries interacting demands.

4. The offer curves approach is a geometrical technique which uses graphical representation to determine the equilibrium terms of trade. This technique is developed by Marshall. Offer curve is a demand curve which shows the demand for one commodity in terms of the supply of another commodity.

3.7 QUESTIONS

1. Explain briefly various types of Terms of Trade and its limitations.
2. Discuss the concept of gains from international trade.
3. Critically evaluate the Theory of Reciprocal demand.
4. Write a note on Offer Curve approach.

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Module 2

4

COMMERCIAL POLICY

Unit Structure:

4.0 OBJECTIVES

1) To understand the concept of commercial trade policy and its objectives
2) To analyse the advantages and disadvantages of free trade
3) To analyse the advantages and disadvantages of Protection
4) To discuss the concept of tariff, types and its effects.
5) To understand the concept of non-tariff barriers

4.1 MEANING AND OBJECTIVES OF COMMERCIAL TRADE POLICY

4.1.1 Meaning

A commercial policy or trade policy refers to a government's policy in relation to a country's international trade. It can be described as the regulations and policies that govern how companies and individuals in one country carry out trade and commerce with companies and individuals in other countries.

4.1.2 Objectives

The following are some of the objectives of the commercial trade policy of a country

1 To increase volume of trade with other countries.

2 To promote and encourage exports based on the comparative advantage of the country.

3 To expand production of goods and services and enjoy economies of scale .

4 To encourage the development of domestic industries.

5 To adopt protectionist policies for protecting domestic industries and preserving foreign exchange reserves.

6 To achieve diversification of domestic industries and Self sufficiency

7 To maintain favourable balance of payment by adopting protectionist policies.

8 To conduct trade with other countries based on mutual benefits forparticipating countries.

4.2 MEANING, ADVANTAGES AND DISADVANTAGES OF FREE TRADE

4.2.1 Meaning

Free trade policy promotes free movement of goods and services between nations. Under a free trade policy, goods and services can be bought and sold across international borders with little or no government tariffs, quotas, subsidies, or prohibitions to inhibit their exchange. The concept of free trade is the opposite of trade protectionism or economic isolationism. The classical economists Adam Smith and David Ricardo were the champions of free trade. According to Adam Smith, tariffs should be removed in order to enjoy the benefits of Free trade.

4.2.1 Advantages of Free Trade

Free Trade enables free movement of goods and services between countries. Following are the advantages of Free Trade.

1) Advantages of Specialization:

Firstly, free trade ensures 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 efficient utilization of resources and, hence, cost reduction in production.

2) All-Round Prosperity:

Secondly, because of free trade between countries, 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.

3) Helps to develop Competitive Spirit:

Thirdly, free trade infuses the spirit of competition in 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 creation of domestic monopolies and give choice to the consumers.

4) Availability of Goods and Services:

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

5) Encourages International Cooperation:

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

6) Free from government Interference:

Finally, free trade is free from bureaucratic interferences. If a country follows free trade policy, it will have less government intervention in trade. Bureaucracy and corruption are very much associated with protectionism type of trade policy.

4.2.2 Arguments against Free Trade:

Despite these virtues, several people justify trade restrictions.

Following arguments are put forth against free trade:

1) Disadvantageous for Least Developing Countries:

Firstly, free trade may be advantageous to the advanced countries but not to the economically backward countries. 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.

2) Destruction of domestic Industries/Products:

Secondly, it may ruin domestic industries. Because of free trade, imported goods become available at a cheaper price. Thus, an unfair competition develops between domestic and foreign industries. In the process, domestic industries are badly affected.

3) Lack of all-round development:

Thirdly, 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.

4) Danger of Overdependence:

Fourthly, free trade brings in the danger of dependence. A country may face economic depression if its international trading partner suffers from it. The Great Depression that 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. Overdependence can also lead to political dominance of more powerful countries over economically less developed countries.

5) Harmful Foreign Goods:

Finally, a country may have to change its consumption habits. Because of free trade, harmful, poor quality products are dumped by multinational corporations in underdeveloped countries. This affects the local industries and lead to loss of consumer welfare. To prevent such, restrictions on trade are required to be imposed.

In view of all these arguments against free trade, governments were encouraged to resort to some kind of trade restrictions to safeguard national interest.

4.3 MEANING, ADVANTAGES AND DISADVANTAGES OF PROTECTION

4.3.1 Meaning

Protectionism is the policy of protecting domestic industries against foreign competition by using tariffs, import quotas, subsidies and any other measure to restrict imports or make them more expensive. The purpose is to use protectionist policies to protect their domestic industries.

4.3.2 Advantages of protection

We discuss various advantages of following protectionism policy:

1. Infant Industries argument: The infant industry argument suggests that new industries should be given temporary protection in order to enable them to build up this capacity to compete. This argument applies where the industry is small and young, and where costs are high.

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 experience 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. This argument is now widely accepted in India as a good ground of protection for a temporary period for promoting home industries at the early stages.

2. Diversification of Industries Argument: A policy of protection is 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 s 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. Protection can increase employment in another way. By improving the balance of trade it can increase employment and income provided the other countries do no retaliate.

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.

6. Dumping: 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. 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 domestic industries need a period of protection in order to develop.

10. 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 protection adopted in India after independence prescribed protection for defence industries at any cost.

11. 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.

4.3.3 Disadvantages

1. **Obstacle to free trade**: 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.
2. **Inefficient resource allocation**: The imposition of tariff economic efficiency. The domestic producers do not have to reduce cost and improve their productivity. In the long run, they become less competitive and find it difficult to compete at global level.
3. **Disadvantage to domestic consumers**: Owing to higher tariff on imports, the consumers are compelled to buy home goods, often of inferior quality and often at higher prices. This leads to loss of consumer welfare.
4. **Protection to weak home industries**: Protection gives shelter to undeserving home industries. Protection leads to inefficiency in domestic industries. Industries keeps relying on government protection and they do not feel the need to improve their competitiveness. Protection also creates political corruption and vested interest.

5. **Diversification not always possible**: Complete diversification of industries is difficult to achieve for any country. Every country does not possess all resources like natural, human or financial to bring about large scale diversification. A country cannot produce all its requirements in an efficient manner through domestic production. Countries will prefer to import goods at lower prices from other countries.
6. **Labour not the only factor of production**: It is argued that countries with high labour costs imports goods from those with low labour costs, the labour in the high costs countries being paid high income. But labour is not the only factor of production. When a country adopts capital intensive techniques of production, it will reduce its average cost despite high costs. On the other hand, countries with low costs tend to use labour intensive techniques which usually have low productivity and high cost. Thus, advanced countries pay higher wages due to high labour productivity. low wages do not necessarily mean low cost as the real cost of labour will be high due to low productivity.
7. **Retaliation by other countries:** Protection may lead to trade wars and international conflicts among trading nations

4.4 MEANING, TYPES AND EFFECTS OF TARIFFS

4.4.1 Meaning of Tariffs:

A tariff is a duty or tax imposed by the government of a country upon the traded commodity as it crosses the national boundaries. Tariff can be levied both upon exports and imports. The tariff or duties imposed upon the goods originating in the home country and scheduled for abroad are called as the export duties. Countries, interested in maximising their exports generally avoid the use of export duties. Tariffs have, therefore, become synonymous with import duties.

The import duties or import tariffs are levied upon the goods originating from abroad and scheduled for the home country. The imposition of import tariff results in the relative changes in prices of products and factors. That brings about a significant change in the structure of international trade. High tariffs certainly have the effect of restricting the volume of international trade.

4.4.2 Types of tariffs

Tariffs are of several types and these can be classified into different groups as below:

(1) On the basis of the criterion for imposition of tariffs.

These can be of such types as:

(a) Specific tariff,

(b) Ad Valorem tariff,

(c) Compound tariff and

(d) Sliding scale tariff.

(a) Specific Tariff:

Specific tariff is the fixed amount of money per physical unit or according to the weight or measurement of the commodity imported or exported. Such duties can be levied on goods like wheat, rice, fertilisers, cement, sugar, cloth etc. Specific duties are quite easy to administer, as they do not involve the evaluation of the goods.

The determination of the value of the traded goods may be difficult as there are several variants of price such as demand price, supply price, market price, contract price, invoice price, f.o.b, (free on board) price, c.i.f (cost, insurance, freight) price etc. The resort to specific duties enables the government to keep out of complexities of prices.

(b) Ad Valorem Tariff:

When the duty is levied as a fixed percentage of the value of the traded commodity, it is called as valorem tariff. Such duties are levied on the products the value of which is disproportionately higher compared to their physical characteristics such as weight or measurement.For instance, if the import of watches is subject to 70 percent ad valorem tariff, a watch valued at Rs. 1000 will be subject to a duty of Rs. 700 and a watch valued at Rs. 1200 will be subject to a tariff amounting to Rs. 840. The ad valorem duties have an additional advantage that the international comparison of tariffs, in their case, can be easily made.

(c) Compound Tariff:

The compound tariff is a combination of specific and ad valorem tariff. The structure of compound tariff includes specific duty on each unit of the commodity plus a percentage of ad valorem duty. The compound tariffs not only impart a greater elasticity to revenues but also assure a more effective protection to the home industries.

(d) Sliding Scale Tariff:

The import duties which vary with the prices of the commodities are termed as sliding scale duties. These may either be on specific or ad valorem basis. In practice, these are generally on a specific basis.

(2) On the basis of purpose of levying the tariff. These can be of two types:

(a) Revenue Tariff and

(b) Protective Tariff.

(a) Revenue Tariff:

The tariff, which is imposed primarily for generating more revenues for the government is called as the revenue tariff. In the less developed countries, there is reliance of the governments on this source of revenue.

(b) Protective Tariff:

The tariff may be imposed by the government to protect the home industries from the cut-throat competition from the foreign produced goods. The higher the tariff, greater may be the protective effect of tariff.

(3) If the tariff is influenced by the consideration of discrimination.

There can be two types of tariffs-

(a) Non-discriminatory and

(b) Discriminatory.

(a) Non-Discriminatory Tariff:

If the uniform tariff rates are applicable to all the commodities irrespective of the country of origin, these are known as non-discriminatory tariffs. Such a system of non-discriminatory tariff is called as single column tariff. This system of tariff is easy and simple to administer. There is, however, one deficiency that it is not elastic enough to adjust according to the changing needs of the industries of the home country. From the viewpoint of revenues too, it may not be satisfactory for the tariff-imposing country.

(b) Discriminatory Tariff:

In case of discriminatory tariff, the varying tariff rates exist for different commodities. The products originating from favoured countries are subject to a lower tariff rate than those of other countries. The discriminatory tariffs can be double or multiple column tariffs.

The double column tariff can be further classified as:

(i) General and conventional tariff

(ii) Maximum and minimum tariff

(iii) Multiple Column Tariff.

(i) General and Conventional Tariff:

The general tariff schedule is determined by the state legislature. It also makes provision for the adjustment in tariff rates as and when required to fulfill the obligations of international commercial agreements. The conventional tariff schedule is evolved through the commercial agreements of the home country with other countries. It does not permit changes in tariff rates according to the changes in domestic conditions or requirements.

The changes can be possible only after negotiations and agreements are reached between the concerned countries or after the expiry of the existing agreement. There is some rigidity in the conventional tariff schedule. In contrast, the general tariff schedule is more flexible

(ii) Maximum and Minimum Tariff:

Under this system, a country has maximum and minimum tariff rates for every commodity. These tariff rates are fixed by the legislature and the government is authorised to apply specific rates of tariff to the goods imported from the different countries. The minimum tariff rates are applied to the products originating from the countries treated as 'The Most Favoured Nations'. The maximum tariff rates are applied for the purpose of improving the bargaining position of the home country vis-a-vis the foreign countries.

(iii) Multiple Column Tariff:

The multiple column tariff consists of three different rates of tariff – a general rate, an international rate and a preferential rate. The general and international tariff rates can be considered equivalent to the maximum and minimum tariff rates discussed above. The preferential tariff is generally applied by a subject country to the products originating from the countries.

(4) Classification on the Basis of Products:

Whether a product is imported or exported can be the basis of tariff.

On this basis, the tariffs can be of the types of:

(a) Import duties and

(b) Exports duties.

(a) Import Duties:

If the home country imposes tariff upon the products of the foreign countries as they enter its territory, the tariff is known as import tariff or import duty.

(b) Export Duties:

If the products of the home country become subject to tax as they leave its territory to be sold in the foreign market, the tax or duty is called as export tariff or export duty.

The import tariffs have remained the matter of deep interest both for analytical and policy reasons. These are far more wide-spread, and almost every country takes resort to them. In contrast, the export duties are applied to a very limited extent. Some countries like the USA have prohibited export duties by law. Even in those countries, where these are in vogue, the basic purpose is to secure larger revenues.

(5) Classification on the Basis of Retaliation:

On this basis, the tariffs can be of the types of

(a) Retaliatory tariffs and

(b) Countervailing tariffs.

(a) Retaliatory Tariffs:

If a foreign country has imposed tariffs upon the exports from the home country and the latter imposes tariffs against the products of the former, the tariffs resorted to by the home country will be regarded as the retaliatory tariffs. The home country, while adopting this measure does not either has the object of raising revenues or protecting home industries but of acting in retaliation.

(b) Countervailing Tariffs:

If the foreign country has been exporting large quantities of its products in the market of the home country on the strength of export subsidies, the home country can neutralise the 'unfair advantage' enjoyed by foreign products through imposing duties upon them as they enter the territory of the home country. The latter has full justification for resorting to these countervailing duties in order that the unfair advantage given by exports subsidies to the foreign products is offset and the competition takes place on equal footing between the foreign and home produced goods.

4.4.3 Effects of tariffs

Tariffs have economic effects on the country that imposes tariffs. According to Kindleberger, there are eight effects of tariffs. The effects of tariffs are based on following Assumptions:

Assumptions:

(i) The demand and supply curves of the given commodity are concerned with home country that imposes import tariff.

(ii) The given demand and supply curves remain constant.

(iii) There is no change in consumers' tastes, prices of other commodities and money income of the consumers.

(iv) There is an absence of technological improvements

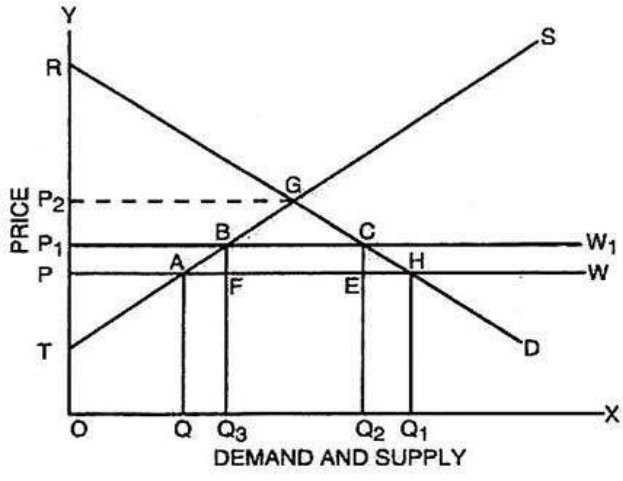

Fig. 4.1 Effect of Tariff

1. Protective Effect:

The imposition of tariff may be intended to protect the home industry from the foreign competition. As tariffs restrict the flow of foreign products, the home producers find an opportunity to increase the domestic production of import substitutes.

In Fig. 1, demand and supply are measured along the horizontal scale and price along the vertical scale. D and S are the domestic demand and supply curves of the given commodity respectively. Originally PW is the world supply curve of the commodity and the pre-tariff price is OP. At the price OP, the domestic supply is OQ and demand is OQ_1.

The gap QQ_1 between demand and supply is met through import of the commodity from abroad. If PP_1 per unit tariff is imposed on import, the price rises to OP_1 and world supply curve shifts to P_1W_1. At this higher price, the demand is reduced from OQ_1 to OQ_2 whereas the domestic supply expands from OQ to OQ_3.$QQ_3$is the Protective Effect of tariff.

2. Consumption Effect:

The imposition of import duty on a particular commodity has the effect of reducing consumption of the consumers. According to Fig. 1 at the free trade price OP, the total consumption was OQ_1. It was constituted by OQ as the consumption of home produced good and QQ_1 as the consumption of foreign produced good. After the imposition of tariff, when price rises to OP_1, the consumption is reduced from OQ_1 to OQ_2. Q1 Q2 is the Consumption effects of tariff.

3. Revenue Effect:

The imposition of import duty provides revenues to the government. When PP_1 per unit tariff is imposed, the revenue receipts of the government can be determined by multiplying per unit tariff PP_1 (or BF) with the quantity imported Q_3Q_2 or (EF). Thus, the revenue receipts due to tariff amount to $PP_1 \times Q_3Q_2 = BF \times EF = BCEF$. This is revenue effect of tariff.

4. Redistributive effect :

The imposition of tariff, on the one hand, causes a reduction in consumer's satisfaction and, on the other hand, provides a larger producer's surplus or economic rent to domestic producers and revenues to the government. Thus, tariff leads to redistributive effect in the tariff-imposing country. The redistributive effect can be shown with the help of Fig. 1.

Loss in Consumer's Surplus = $RHP - RCP_1 = PHCP_1$

Gain in Producer's Surplus = $TBP_1 - TAP = PABP_1$

Gain in Revenues to the Government = BCEF

Net Loss = $PHCP_1 - (PABP_1 + BCEF)$

$= \Delta BAF + ACEH$

Kindelberger calls this net loss as the "deadweight loss" due to tariff. It signifies the cost of tariff. It is clear that tariff causes a redistribution of income or satisfaction in the given country. Consumers suffer a loss while producers and government make a gain.

5. Terms of Trade Effect:

The terms of trade effect depend upon the elasticities of demand and supply of products of the two trading countries.

If the foreign supply of a good is perfectly elastic or if the foreign suppliers are ready to supply the product at a constant price, the imposition of tariff is not likely to improve the terms of trade for the tariff-imposing country. In case the foreign supply of a good is not perfectly elastic, the imposition of tariff can have varying effects upon the terms of trade of the tariff-imposing country depending upon the elasticities of demand and supply in the two trading countries.

6. Competitive Effect:

The increase in the competitive power of the domestic industries through tariff is called as the competitive effect. The imposition of tariff, can facilitate the growth of an infant industry which otherwise is not in a position to face the foreign competition. As tariff makes the foreign product relatively more costly, the domestic infant industry finds opportunity to grow behind the protective shield. Thus tariff increases the competitive power of the industries of tariff-imposing country.

7. Income Effect:

The imposition of tariff reduces the demand for foreign products. If there is the existence of surplus productive capacity in the home country, switch of expenditure from foreign to home-produced goods will lead to a rise in production, employment and income.

8. Balance of Payments Effect:

When tariff is imposed by a country upon foreign products, the home-produced goods become relatively cheaper than the imported goods. The price effect caused by tariff, on the one hand, reduces imports from other countries and on the other hand, causes increased production and purchase of home- produced goods. That leads to a reduction in the balance of payments deficit of the home country.

4.5 NON-TARIFF BARRIERS

4.5.1 Meaning of Import Quotas

The import quota means physical limitation of the quantities of different products to be imported from foreign countries within a specified period, usually one year. The import quota may be fixed either in terms of quantity or the value of the product.

4.5.2 Types of import quotas

The system of import quotas may be classified into five major types.

(1) The tariff or custom quota,

(2) The unilateral quota,

(3) The bilateral quota,

(4) The mixing quota, and

(5) Import licensing.

1. The Tariff Quota:

Under this system, import of a commodity up to a specified quantity is allowed to be imported duty-free or at a special low rate of duty. But imports in excess of this fixed limit are charged a higher rate of duty. The tariff quota thus combines the features of a tariff with those of quota. Flexibility is another advantage of this system.

2. The Unilateral Quota:

Under this system, a country places an absolute limit on the importation of a commodity during a given period. It is imposed without prior negotiation with foreign governments.

The quota so fixed may be either global or allocated. Under global quota, the commodity can be imported from any country up to the full amount of the quota. Under an allocated quota system, however, the total of the quota is distributed among specified supplying countries.

3. The Bilateral Quota:

Under this system, quotas are set through negotiation between the importing country and the exporting country (or foreign export groups). Quotas are decided by mutual agreement. It minimises the suspicion of discrimination. It is less arbitrary, and, therefore, arouses less or no opposition from the exporting countries. Thus, it provokes no retaliation activity.

4. The Mixing Quota:

It is a type of regulation which requires producers to utilise a certain proportion of domestic raw materials along with imported parts to produce finished goods domestically.

It thus sets limits on the proportion of foreign-made raw materials to be imported and used in domestic production.

Such mixing regulations have two broad objectives:

(i) To assist domestic producers of raw materials, and

(ii) To save scarce foreign exchange.

5. Import Licensing:

The mechanism of import licensing has been evolved as a system devised to administer quota regulations. Under this, prospective importers are required to obtain a licence from the proper authorities for importing any quantity within the specified quotas. Licences are generally distributed among established importers keeping in view their share in the country's import trend.It provides much closer control over the volume of imports.It tends to minimise speculative activity. It reduces excessive fluctuations in prices produced by the scramble to import before the quota is filled (in the absence of licensing system) It allows a high degree of **flexibility in the restriction of imports.**

4.5.3 Effects of Quotas

The import quotas can have various effects such as price effect, protective or production effect, consumption effect, revenue effect, redistributive effect, terms of trade effect and balance of payments effect.

The effects of import quotas can be discussed with the help of Fig.2. In this figure, S_0 is the foreign supply curve under free trade and it is perfectly elastic. S_1 is the domestic supply curve which slopes positively. D is the demand curve for the given commodity and it slopes negatively. The quantity demanded and supplied of the given commodity is measured along the horizontal scale and price is measured along vertical scale.

In the conditions of free trade, the quantity supplied is OQ and the quantity demanded is OQ_1. The excess of demand over supply is met through the import from abroad.

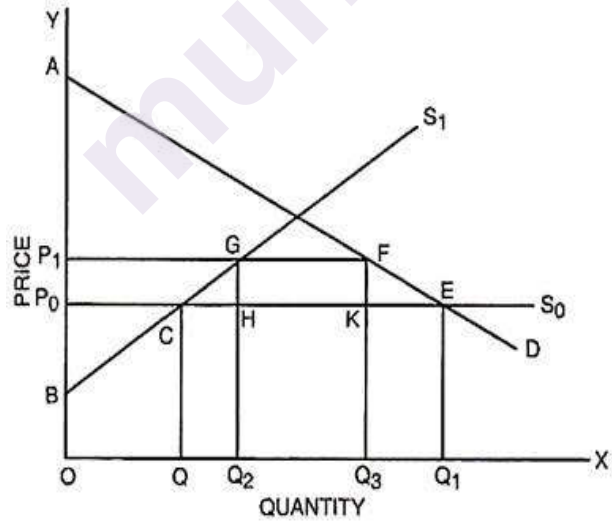

Figure 4.2: Effect of Quota

1. Price Effect:

Import quota is the direct physical limitation of the quantity of the given commodity imported from the foreign country. The enforcement of import quota restricts its availability in the home market and creates shortage and

consequent rise in its price. Originally, the price of the commodity was Po and the quantity imported amounted to QQ_1. The government of the home country fixes the import quota to the extent of Q_2Q_3.

The initial total supply in the home market, made up of OQ as the domestic output and QQ_1 as the import, amounted to $OQ + QQ_1 = OQ_1$. After the enforcement of import quota, the total supply is OQ_3 out of which domestic production is OQ_2 and import quota is Q_2Q_3 ($OQ_3 = OQ_2 + Q_2Q_3$). It signifies a shortage of the commodity compared with the original situation. As a consequence, given the supply OQ_3 and demand curve D, the price rises from P_0 to P_1. This rise in the price of the commodity is the price effect of import quota.

2. Protective or Production Effect:

An import quota has a protective effect. As it reduces the imports, the domestic producers are induced to increase the production of import substitutes. The increased domestic production due to import quota is called as the protective or production effect. According to Fig.2, originally the domestic production was OQ. After the import quota is fixed at Q_2Q_3, the domestic production expands from OQ to OQ_2. Thus there is an increase in domestic production by QQ_2. This is the protective or production effect.

3. Consumption Effect:

After the import quota is prescribed, there is a rise in the domestic price of the given commodity. As a consequence, the consumption of the commodity gets reduced. This is known as the consumption effect. In Fig.2, the consumption under free trade situation is OQ_1. After the fixation of import quota up to Q_2Q_3, the total consumption at the higher price P_1 is reduced to OQ_3. Thus there is a reduction in consumption by $OQ_1 – OQ_3 = Q_1Q_3$, subsequent to the fixation of import quota. This is the consumption effect.

4. Redistributive Effect:

The fixation of import quota leads to a rise in the price of the given commodity. It may result in a loss in consumer's surplus for the importing country. At the same time, higher price and increased production ensures a gain in producer's surplus. Thus, import quota causes redistributive effect in the quota enforcing country. According to Fig. 2 after the fixation of import quota, the price rises from P_0 to P_1 and the loss in consumer's surplus amounts to P_0EFP_1.

The gain is producer's surplus amounts to P_0CGP_1. If importers are organised, an amount equal to the revenue effect GHKF will accrue to them. Consequently, the net loss to the community will be $P_0EFP_1 – (P_0CGP_1 + GHKF) = \Delta GCH + \Delta FKE$. If the revenue effect neither accrues to the government nor to the importers, the redistribution effect will involve a large net loss in welfare. In this case, the net loss in welfare will amount to $P_0EFP_1 – P_0CGP_1 = GCEF$.

5. Terms of Trade Effect:

The imposition of import quota can influence the terms of trade of a country in a favourable or unfavourable way depending upon the elasticity of the offer curve. If the offer curve of importing country is elastic, the terms of trade will become favourable to it.

On the contrary, if the offer curve of exporting country is elastic, the terms of trade are likely to become favourable for it and unfavourable for the importing country.

The terms of trade effect of import quota can be explained through Figure 3. Cloth is the exportable commodity and steel is the importable commodity of the quota-imposing home country A. OA is the offer curve of country A and OB is the offer curve of foreign country B.

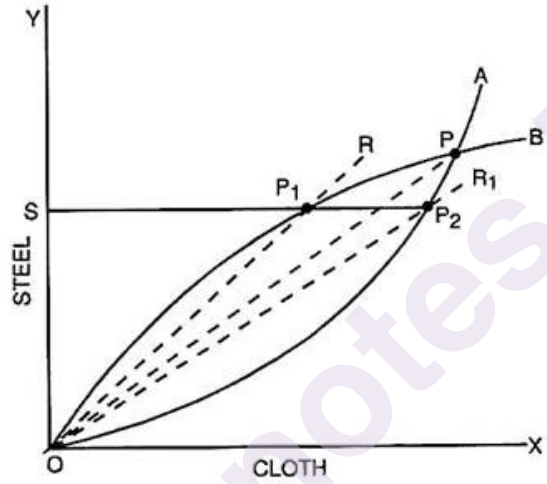

Figure 4.3: Terms of trade effect of quota

Originally P is the point of exchange and the terms of trade are measured by the slope of the line OP. If the county A imposes an import quota OS upon the importable commodity steel, the exchange can take place either at P_1 or P_2. If P_1 is the point of exchange, the terms of trade are measured by the slope of the line OR. Since OR is steeper than OP, the terms of trade become favourable to the home country A.

On the opposite, if exchange takes place at P_2, the terms of trade are measured by the line OR_1 which is less steep than OP. In this case, the terms of trade become unfavourable to the quota-imposing country A. It shows that the terms of trade may be uncertain or indeterminate consequent upon the enforcement of a specified quota upon imports.

4.5.4 Types of Non tariff barriers

1. **Voluntary export restraints (VERs)**: A Voluntary export restraint (VER)is an agreement by an exporter country's government with an importing country to limit their exports to it. It is activated by the importing country in order to protect its domestic industries. The limit

to imports is set in terms of quantity, value or market share. VERs are rarely voluntary, they are accepted by exporters in order to continue to gain access to the market of the importing countries. An example of VERs is the voluntary restraint on Japanese automobile exports to US negotiated in 1981.

2. **Countervailing Duty (CD):** CD is an import duty imposed on the imported products when such products are imported . It is an attempt to ensure fair and market-oriented pricing of imported products and thereby protecting domestic industries and firms. Certain foreign countries enjoy benefits like export subsidies and export concessions in the country of their origin. It is an attempt to ensure fair and market-oriented pricing of imported products and thereby protecting domestic industries and firms. The objective of CD is to eliminate the low-cost advantage that is enjoyed by the imported product. The CD helps to provide a level playing field for the domestic product.

3. **Antidumping duties:** To stop dumping of cheap products, importing countries imposes tariffs on the product. This leads to increase in the price of the imported product. This non tariff barrier is an important measure taken to protect domestic producers against cheap imports coming from other countries.

4. **Technical, Administrative, and other regulations**: International trade is restricted by numerous technical, administrative, and other regulations. These include safety regulations, health regulations for food products, labelling requirements showing origin and contents. These types of barriers are usually imposed by developed countries against imports from developing countries.

5. **Preferential government procurement policy**: Under this policy, government gives priority to local producers in their procurement policy. The ministries are forbidden to purchase imported products and are directed to give preference to domestically produced goods.

6. **Local content requirement**: The government may discourage the import of raw material by making it compulsory for domestic producers to buy raw material from the domestic market. The proportion is expressed either in terms of physical quantity of raw material or in terms of value of the raw materials

7. **Export subsidy**: Export subsidies are direct payment or the granting of tax relief and subsidized loans to a country's exporters. It is given in order to reduce the price per unit of goods exported abroad. It enables the firm to sell a larger quantity of its goods at a lower price in the export market than in the home market. Export subsidies may be direct or indirect. Though direct export subsidies are prohibited under GATs agreement, countries use indirect export subsidies for export promotion. These include subsidized credit, property allocation of scare raw material or foreign exchange , tax concession. Etc.

4.6 SUMMARY

In this module, we have studied the concept of commercial policy and its objectives. There are two types of commercial policy; Free trade and Protection. Under free trade, trade takes place between countries without any trade barriers. Free trade has advantages like efficient allocation of resources, specialization and international co-operation. Under protection policy, countries use trade barriers like tariff , import quotas to restrict imports and protect domestic industries. Protection is advocated on the basis of Infant industry argument, diversification of industries and employment protection. Countries use tariff for restricting imports Tariffs are used by counties to reduce imports and increase domestic production. Quotas on the other hand limit the physical quantity of goods imported in the country. It is an example of non tariff barrier. Countries also use other non tariff barriers like Voluntary export restraints, antidumping duties and technical, administrative, and other regulations to protect domestic market.

4.7 QUESTIONS

1) What is commercial trade policy? What are its main objectives?
2) Discuss the arguments in favour of free trade policy
3) Discuss the arguments against free trade policy.
4) Discuss the arguments in favour of protection policy
5) Discuss the arguments against protectionism policy.
6) Discuss the types of tariff.
7) Explain the economic effects of tariffs.
8) What are quotas. Describe the types of quotas.
9) Explain the economic effects of quotas.
10) Describe any two types of non-tariff barriers

5

ECONOMICS OF INTEGRATION

Unit Structure:

5.0 OBJECTIVES

1) To study the meaning, objectives and types of economic integration.

2) To understand the aim and achievements of European Union

3) To understand the reasons for BREXIT

4) To explore the role of ASEAN

5.1 ECONOMIC INTEGRATION: MEANING, OBJECTIVES AND TYPES

5.1.1 Meaning of Economic Integration

The modern economic system is based upon such techniques that can be employed economically only if the production takes place on a very large scale. This requires expanding markets on the one hand and increasing purchasing power with the people on the other.

For effective utilization of the modern techniques, certain countries having small internal markets, have attempted to organise themselves into regional groupings. The economic integration, in the broadest sense, means the unification of distinct economies into a single larger economy.

The economic integration, according to Salvatore, is the "commercial policy of discriminatively reducing or eliminating trade barriers only among the nations joining together."

Thus, the economic integration refers to an arrangement whereby two or more countries combine into a larger economic region through the

removal of discontinuities and discriminations existing along national frontiers, while following a common tariff and trade policies against the countries outside the group.

Tinbergen has defined economic integration as "the creation of the most desirable structure of international economy, removing artificial hindrances to the optimum operation and introducing deliberately all desirable elements of co-ordination and unification." Tinbergen has distinguished-between the negative and positive aspects of integration.

The negative aspects of integration involve the removal of discrimination and restrictions on the movement of goods among the member countries. The positive aspects of integration involve the adoption of such policy measures and institutional arrangements as facilitate the removal of market distortions within the given economic region.

The economic integration can be understood both as a process and as a state of affairs. As a process, it is concerned with the measures which aim at abolition of discrimination between economic units belonging to different nation states. As a state of affairs, it can be treated as an area comprised of different nation states among which there is an absence of various forms of discrimination.

There are two essential features of economic integration:

(i) Introduction of free trade among the member nations.

(ii) Imposition of a common external tariff policy against the non-member countries.

From these two features, it follows that economic integration is a synthesis between free trade and tariff protection.

5.1.2 Objectives of Economic Integration

The economic integration between two or more countries brings the following main benefits:

(i) Economies of Scale:

The individual countries, having small internal market, have limited capacity to expand production. The economic integration provides an unrestricted access of the products produced by any member country. This gives strong incentive to expand production and exploit fully advantages of economies of scale.

(ii) International Specialisation:

The economic integration enables the member countries to attain a greater degree of specialisation in both products and processes. Specialisation based on comparative cost advantage by member countries can cause considerably large expansion in production.

(iii) Qualitative Improvement in Output:

The regional economic co-operation among a number of countries leads to rapid technological changes and larger and easier capital movements. The member countries, in such favourable conditions, can bring about qualitative improvement in production. There is also investment in infrastructure to facilitate trade among member nations.

(iv) Expansion of Employment:

As some countries organise themselves into regional economic groups and allow unrestricted flow of labour within the region, there can be maximisation of employment and income. This increases the welfare of the people.

(v) Improvement in Terms of Trade:

The economic integration improves the bargaining power of the member countries vis-a-vis the rest of the world. That brings about a significant improvement in their terms of trade.

(vi) Increase in Economic Efficiency:

The economic integration results in increased competition within the region. That helps in maintaining a higher level of economic efficiency of the group as a whole. This leads to better utilization of resources for the participating countries.

(vii) Improvement in Living Standard:

As some countries organise themselves into regional groups, there is easier availability of superior varieties of goods at competitive prices. The increase in employment opportunities and the purchasing power too contributes in improving the living standards of the people.

(viii) Increase in Factor Mobility:

The economic integration leads to dismantling of barriers upon the movement of labour and other factors among the member countries. Increased factor mobility enlarges employment; lowers factor costs; and promotes productive activity in all the member countries.

(ix) Political cooperation:

Economic co-operation lays the foundation for better political relations between the member countries and such relations can be used to resolve conflicts in the region.

3.1.3 Types of Economic Integration

The economic integration areof the following main types:

1) Preferential Trade Area:

The preferential trade area or association is the most-loose form of economic integration. In this arrangement, the member countries lower tariffs on imports from each other. In other words, the member countries gives preferential treatment to each other.

For non-member countries, they continue to maintain their individual tariffs. The best example of preferential trade area is the Commonwealth System of Preferences, established in 1932. It is headed by Britain and includes all the Commonwealth countries.

2) Free Trade Area:

In this form of economic integration, the member countries eliminate completely both tariff and other trade restrictions among themselves. However, each member country is free to maintain its own trade barriers against the non- member countries. An important example of free trade area is the European Free Trade Association (EFTA).

This association was formed in November, 1959. It included countries such as United Kingdom, Austria, Denmark, Norway, Sweden, Portugal, Switzerland and Finland as associate members. Another such association is Latin American Free Trade Association (LAFTA). It was formed in June 1961 by 10 Latin American countries.

3) Customs Union:

A more formal type of integration among two or more countries is the customs union. In this form of integration, the member countries abolish all tariffs and other trade barriers among themselves. They also adopt a common external tariff and commercial policy.

The customs unions and free trade area are similar in respect of abolition of all trade barriers for the member countries. But the customs union is distinct from the free trade area in respect of the common external tariff against the non-member countries.

In case of free trade area, the member countries retain their own tariff and other trade barriers against the non-member countries. Thus, customs union is a more closely- knit form of integration than the free trade area. In a customs union, all the member countries act as a single economic unit against the non-member countries. The example of a customs union is the European Economic Community formed by West Germany, France, Italy, Belgium, the Netherlands, and Luxembourg in 1957.

4) Common Market:

The common market means a more unified arrangement among a group of countries than the customs union. The common market involves the abolition of tariff and trade restrictions among the member countries and adoption of a common external tariff. It further involves free movement of labour and capital among the member nations.

Thus, in case of a common market, there is a free and integrated movement of goods and factors among the member countries. The European Common Market (ECM) called also as the European Economic Community (EEC) is the best example of the common market.

(v) Economic Union:

The most advanced form of economic integration involving the greatest degree of co-operation is the economic union. In case of an economic union, two or more countries form a common market. In addition, adopt a common fiscal, monetary, exchange rate, industrial and other socio-economic policies. The member countries try to create a common currency and banking system.

An example of economic union is BENELUX (including Belgium, Netherlands, and Luxembourg) which was formed in 1948 initially as a customs union but later got converted into an economic union in 1960. These countries have now joined the EU. The European Economic Community (EEC) has transformed itself into an economic union called as European Union (EU) in 1991.

5.2 EUROPEAN UNION

The History of the EU

The concept of a European trade area was first established in 1950. The European Coal and Steel Community (ECSC) had six founding members: Belgium, France, Germany, Italy, Luxembourg, and the Netherlands.

The Treaty of Rome established a common market in 1957. It eliminated customs duties in 1968 and put in place standard policies, particularly in trade and agriculture. The ECSC added Denmark, Ireland, and the United Kingdom in 1973. It created its first Parliament in 1979. Greece joined in 1981, followed by Spain and Portugal in 1986.

The Treaty of Maastricht established the European Union common market in 1993. The EU added Austria, Sweden, and Finland two years later. Twelve more countries joined in 2004: Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, and Slovenia. Bulgaria and Romania joined in 2007.

The Treaty of Lisbon increased the powers of the European Parliament in 2009. It gave the EU the legal authority to negotiate and sign international treaties. It increased EU powers, border control, immigration, judicial cooperation in civil and criminal matters, and police cooperation.

19 member states joined a monetary union known as the eurozone, which uses the euro as a single currency. The currency union represents 342 million EU citizens. The euro is the second largest reserve currency as well as the second most traded currency in the world after the United States dollar.

The aims of the European Union within its borders are:

- promote peace, its values, and the well-being of its citizens
- offer freedom, security, and justice without internal borders, while also taking appropriate measures at its external borders to regulate asylum and immigration and prevent and combat crime
- establish an internal market
- achieve sustainable development based on balanced economic growth and price stability and a highly competitive market economy with full employment and social progress
- protect and improve the quality of the environment
- promote scientific and technological progress
- combat social exclusion and discrimination
- promote social justice and protection, equality between women and men, and protection of the rights of the child
- enhance economic, social, and territorial cohesion and solidarity among EU countries
- respect its rich cultural and linguistic diversity
- establish an economic and monetary union whose currency is the euro

The aims of the EU within the wider world are:

- uphold and promote its values and interests
- contribute to peace and security and the sustainable development of the Earth
- contribute to solidarity and mutual respect among peoples, free and fair trade, eradication of poverty and the protection of human rights
- strict observance of international law

Achievements of EU

1. Peace and stability:

The EU has delivered over half a century of peace, stability, and prosperity. It also plays an important role in diplomacy and works to promote these same benefits – as well as democracy, fundamental freedoms, and the rule of law – across the globe. In 2012, the EU was awarded the Nobel Peace Prize for its achievements in this field.

2. Single market:

The EU's main economic engine is the single market. It enables most goods, services, money and people to move freely throughout most of the continent.

It has certainly become much easier to move around Europe – all EU citizens have the right to study, work or retire in any EU country. As an EU national, for employment, social security and tax purposes, every EU country is required to treat citizens other other member countries the same as its own citizens.

- **Euro** – used by over 340 million EU citizens, the euro has eliminated the risk of currency fluctuation and exchange costs, and strengthened the single market – to the benefit of us all.
- **Telephone & digital services** – Citizens can use your phone and online services at no extra cost across the EU, thanks to the end of roaming rules.

3. Citizens' rights and protections:

The Treaty on the European Union gives EU citizens and legal residents a wide range of rights, enacted in EU law across many fields.

4. Charter of fundamental rights:

The Charter brings together all the personal, civic, political, economic and social rights enjoyed by people within the EU.

5. Employment rights:

Every EU worker enjoys certain minimum rights relating to health and safety at work; equal opportunities; protection against all forms of discrimination; and labour laws.

6. Digital rights:

The EU has taken a strong stance to protect individual rights and personal information in its data protection and privacy laws, to ensure we all have more control over our personal data.

7. Consumer rights:

EU consumers can feel safe in the knowledge that they will get their money back if they return unwanted products and will receive a refund if they experience any avoidable delays or cancellations while travelling. And the standards goods in EU shops must meet are among the world's most stringent, in terms of both quality and safety.

8. Business, growth and trade:

The EU is the largest trade bloc in the world. It is the world's biggest exporter of manufactured goods and services, and the biggest import market for over 100 countries.

Free trade among its members was one of the EU's founding principles. This is possible thanks to the single market. Beyond its borders, the EU is also committed to liberalising world trade.

9. Business:

The EU has ensured that its citizens are protected against the downsides of globalisation through EU support for small businesses and rules to make sure big companies pay their fair share of tax. The EU can also help if small business owners are treated unfairly.

10. Trade:

The EU has achieved a strong position by acting together with one voice on the global stage, rather than with separate trade strategies.

The EU is in prime position when it comes to global trade. The openness of our trade regime has meant that the EU is the biggest player on the global trading scene and remains a reliable partner to do business with.

EU-Singapore free trade agreement: This agreement, signed in 2018, makes it easier for EU firms to export more to Singapore, helps protect people's rights at work and the environment and opens Singapore's markets to EU companies for services and government contracts.

11. Food quality and environmental standards:

Because EU countries cooperate so closely, food and environment meet some of the world's highest quality standards.

12. Food:

Protecting health is the aim of all EU laws and standards in the farming and food sectors. An extensive body of EU-wide law covers the entire food production and processing chain within the EU, as well as imported and exported goods.

13. Environment:

The EU has developed some of the strictest environmental standards in the world. EU policy seeks to minimise risks to the climate, health and biodiversity. EU has already achieved Emissions targets.

14. International diplomacy & development:

EU countries acting in unison have much more of a voice on the world stage than 27 nations of varying size acting separately. Taken together, the EU institutions and national governments are the world's leading donor of development assistance and work collectively to promote good governance, fight hunger, and preserve natural resources.

15. Diplomacy & security:

Through its political, practical, and economic support, the EU has played a crucial role in building peace in the Western Balkans since the Yugoslav wars. One example is the EU-facilitated dialogue between Serbia and Kosovo, which led to a landmark deal in April 2013 that is currently being implemented, with EU support.

16. Human rights:

The EU has developed human rights policy guidelines covering areas such as the penalty, and freedom of expression, both on and offline. The EU's Instrument for Democracy and Human Rights (EIDHR) provides support to improve respect for human rights and fundamental freedoms in countries and regions where they are most at risk.

17. Humanitarian aid:

The EU provides assistance to countries and populations, both within Europe and abroad, when major disasters or humanitarian emergencies strike. Collectively, the EU and its constituent countries are the world's leading donor of humanitarian aid. Every year the EU provides food, shelter, protection, healthcare and clean water to over 120 million victims of disasters and conflict in over 80 countries.

5.3 BREXIT

What Is Brexit?

Brexit' is the name given to the United Kingdom's departure from the European Union.

Referendum: Majority votes to leave

On 23 June 2016, the UK held a referendum on its membership of the EU. The question facing voters was: 'Should the United Kingdom remain a member of the European Union or leave the European Union?' 51.89% of voters voted to leave the EU. The UK left the EU on 31 January 2020.

Timeline for BREXIT

The process of leaving the EU formally began on March 29, 2017, when Britain Prime Minister Teresa May triggered Article 50 of the Lisbon Treaty. The U.K. initially had two years from that date to negotiate a new relationship with the EU. Following a snap election on June 8, 2017, May remained the country's leader. However, the Conservatives lost their outright majority in Parliament and agreed on a deal with the Euroskeptic Democratic Unionist Party (DUP). This later caused May some difficulty getting her Withdrawal Agreement passed in Parliament.Talks began on June 19, 2017. Questions were raised around the process, in part because Britain's constitution is unwritten and in part because no country has left the EU using Article 50 before.

On Nov. 25, 2018, Britain and the EU agreed on a 599-page Withdrawal Agreement, a Brexit deal, touching upon issues like citizen's rights, the divorce bill, and the Irish border. Parliament first voted on this agreement on Jan. 15, 2019. Members of Parliament voted 432-202 to reject the agreement, the biggest defeat for a government in the House of Commons in recent history.

May stepped down as party leader on June 7, 2019, after failing three times to get the deal she negotiated with the EU approved by the House of Commons. The following month, Boris Johnson, was elected prime minister.

Johnson, a hardline Brexit supporter, campaigned on a platform to leave the EU by the October deadline "do or die" and said he was prepared to leave the EU without a deal. U.K. and EU negotiators agreed on a new divorce deal on Oct. 17. The main difference from May's deal is that the Irish backstop clause has been replaced with a new arrangement.

The U.K. was expected to leave the EU by Oct. 31, 2019, but the U.K. Parliament voted to force the government to seek an extension to the deadline and also delayed a vote on the new deal. Boris Johnson then called for a general election. In the Dec. 12 election, the third general election in less than five years, Johnson's Conservative Party won a huge majority of 364 seats in the House of Commons out of the 650 seats.

On Dec. 24, 2020, the U.K. and the EU struck a provisional free-trade agreement that ensures the two sides can trade goods without tariffs or quotas. However, key details of the future relationship remain uncertain, such as trade in services, which make up 80% of the U.K. economy. This prevented a “no-deal” Brexit, which would have been significantly damaging to the U.K. economy.

A provisional agreement was approved by the U.K. parliament on Jan. 1, 2021. It was approved by the European Parliament on April 28, 2021. While the deal, known as the Trade and Cooperation Agreement (TCA) allows tariff- and quota-free trade in goods, U.K.-EU trade still faces customs checks, meaning commerce is not as smooth as when the U.K. was a member of the EU.

Arguments For Brexit

Voters based their support for Brexit on a variety of factors, including the European debt crisis, immigration, terrorism, and the perceived drag of Brussels' bureaucracy on the U.K. economy. Britain has long been wary of the European Union's projects, which voters feel threatens the U.K.'s sovereignty: the country never opted into the European Union's monetary union, meaning that it uses the pound instead of the euro. It also remained outside the Schengen Area, meaning that it does not share open borders with a number of other European nations.

Although supporters of Brexit have tended to stress issues of national pride, safety, and sovereignty, they also muster economic arguments. For example, Boris Johnson, , said on the eve of the vote, "EU politicians would be banging down the door for a trade deal" the day after the vote, in light of their "commercial interests."[30] Labor Leave, the pro-Brexit Labour group, co-authored a report with a group of economists in Sept. 2017 that forecasted a 7% boost to annual GDP, with the largest gains going to the lowest earners.

5.4 ASSOCIATION OF SOUTHEAST ASIAN NATIONS (ASEAN)

The Association of Southeast Asian Nations (ASEAN) is a regional group of 10 Southeast Asian nations that promotes economic, political and security cooperation among its members. Its members include Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam. In 2020, the estimated total GDP of all ASEAN states amounted to approximately 3.08 trillion U.S. dollars.

History: The ASEAN was established on 8th August 1967 in Bangkok, Thailand with the signing of the ASEAN Declaration by the founding members, Indonesia, the Philippines, Singapore and Thailand. Later, the other members joined the regional group.

Aims of ASEAN

- To accelerate the economic growth, social progress and cultural development in the region through joint endeavours in the spirit of equality and partnership in order to strengthen the foundation for a prosperous and peaceful community of Southeast Asian Nations.
- To promote regional peace and stability through abiding respect for justice and the rule of law in the relationship among countries of the region
- To promote active collaboration and mutual assistance on matters of common interest in the economic, social, cultural, technical, scientific, and administrative fields.
- To provide assistance to each other in the form of training and research facilities in the educational, professional, technical and administrative spheres.
- To collaborate more effectively to encourage further growth in the agriculture and industry, and trade sectors.
- To promote Southeast Asian studies; and
- To maintain close and beneficial cooperation with existing international and regional organisations with similar aims and purposes and explore all avenues for even closer cooperation among themselves.

5.5 ASEAN CHARTER

The ASEAN Charter serves as a firm foundation in achieving the ASEAN Community by providing legal status and institutional framework for ASEAN. It also codifies ASEAN norms, rules, and values; sets clear targets for ASEAN; and presents accountability and compliance. The ASEAN Charter entered into force on 15 December 2008. A gathering of the ASEAN Foreign Ministers was held at the ASEAN Secretariat in Jakarta to mark this very historic occasion for ASEAN.

With the entry into force of the ASEAN Charter, ASEAN will hence forth operate under a new legal framework and establish a number of new organs to boost its community- building process. In effect, the ASEAN Charter has become a legally binding agreement among the 10 ASEAN Member States.

The importance of the ASEAN Charter can be seen in the following contexts:

- New political commitment at the top level
- New and enhanced commitments
- New legal framework, legal personality
- New ASEAN bodies
- Two new openly-recruited DSGs
- More ASEAN meetings
- More roles of ASEAN Foreign Ministers
- New and enhanced role of the SecretaryGeneral of ASEAN
- Other new initiatives and changes

ASEAN Political Security Community:

To build on what has been constructed over the years in the field of political and security cooperation, the ASEAN Leaders agreed to establish the ASEAN Political-Security Community (APSC). The APSC aims to ensure that countries in the region live at peace with one another and with the world in a just, democratic and harmonious environment.

The members of the Community pledge to rely exclusively on peaceful processes in the settlement of intra-regional differences and regard their security as fundamentally linked to one another and bound by geographic location, common vision and objectives. It has the following components: political development; shaping and sharing of norms; conflict prevention; conflict resolution; post-conflict peace building; and implementing mechanisms.

The APSC Blueprint envisages ASEAN to be a rules-based Community of shared values and norms; a cohesive, peaceful, stable and resilient region with shared responsibility for comprehensive security; as well as a dynamic and outward-looking region in an increasingly integrated and interdependent world.

The APSC Blueprint is guided by the ASEAN Charter and the principles and purposes contained therein. It provides a roadmap and timetable to establish the APSC by 2015. It also leaves room for flexibility to continue programmes/activities beyond 2015 in order to retain its significance and have an enduring quality.

Economic Community:

The AEC is the realization of the region's end goal of economic integration. It envisions ASEAN as a single market and product base, a highly competitive region, with equitable economic development, and fully integrated into the global economy.

The history of AEC can be traced back as far as 1992 when the ASEAN Leaders mandated the creation of the ASEAN Free Trade Area (AFTA). Since then, efforts were intensified to broaden the region's economic potentials. The adoption of ASEAN Vision 2020 by the Leaders in 1997 has further envisaged ASEAN as a highly competitive region with free flow of goods, services, investments, a freer flow of capital, equitable economic development and reduced poverty and socio-economic disparities.

In 1998, the Leaders adopted the Hanoi Plan of Action (HPA). It chartered out a set of initiatives for economic integration to realize the ASEAN Vision 2020. Recognizing the need for an integrated region, the Leaders issued the Declaration of ASEAN Concord II in 2003 which set out the establishment of ASEAN Community (initially targeted by 2020 but was later accelerated to 2015). The Declaration of ASEAN Concord II comprise of three pillars including the AEC.

The AEC Blueprint 2015 was adopted in 2007 as a coherent master plan guiding the establishment of the AEC in 2015. Immediately after that, a new AEC Blueprint 2025 was developed to set the strategic directions for the next phase of ASEAN's economic integration agenda. The AEC Blueprint 2025 is envisaged to further deepen economic integration and achieve a more integrated economic community with the following characteristics:

- A Highly Integrated and Cohesive Economy
- A Competitive, Innovative and Dynamic ASEAN
- Enhanced Connectivity and Sectoral Cooperation
- A Resilient, Inclusive, People Oriented and People-Centered ASEAN, and A Global ASEAN

These characteristics support the vision for the AEC under the ASEAN Community Vision 2025.

ASEAN Socio Cultural Community:

The ASEAN Socio Cultural Community is all about realizing the full potential of ASEAN citizens. The ASCC Blueprint 2025 was adopted by the ASEAN Leaders at the 27th ASEAN Summit on 22 November 2015 in Kuala Lumpur, Malaysia.

ACSS is working towards:

- A committed, participative, and socially responsible community for the benefit of ASEAN people

- An inclusive community that promotes high quality of life, equitable access to opportunities for all, and promotes and protects human rights.
- A sustainable community that promotes social development and environmental protection
- A resilient community with enhanced capacity and capability to adapt and respond to social and economic vulnerabilities, disasters, climate change, and other new challenges, and
- A dynamic and harmonious community that is aware and proud of its identity, culture and heritage.

To achieve this, Member States are cooperating on a wide range of areas, including: Culture and Arts, Information and Media, Education, Youth, Sports, Social Welfare and Development, Gender, Rights of Women and Children, Rural Development and Poverty Eradication, Labour, Civil Service, Environment, Haze, Disaster Management and Humanitarian Assistance and Health.

Many of these issues, such as human capital development, social protection, pandemic response, humanitarian assistance, green jobs and circular economy, are cross-sectoral in nature. To manage both the cohesiveness of the pillar and also cross-sectoral issues, two platforms have been developed: (1) the ASCC Counciland (2) the Coordinating Conference on the ASCC (SOC-COM).

ASEAN and India:

India became ASEAN Dialogue Partner in 1996. Preliminary ASEAN data showed that two-way merchandise trade between ASEAN and India reached USD 77.0 billion in 2019, while total FDI inflows from India amounted to USD 2.0 billion. This placed India as ASEAN's sixth largest trading partner and eight largest source of FDI among ASEAN Dialogue Partners. At the 2nd ASEAN-India Summit in 2003, the Leaders signed the ASEAN-India Framework Agreement on Comprehensive Economic Cooperation. The Framework Agreement laid a sound basis for the establishment of an ASEAN-India Free Trade Area (FTA), which includes FTA in goods, services and investment.

The ASEAN-India Trade in Goods Agreement (AITIGA) entered into force on 1 January 2010. The signing of the AITIGA on 13 August 2009 in Bangkok paved the way for the creation of one of the world's largest free trade areas with more than 1.9 billion people and a combined GDP of US$ 5.36 trillion. The ASEAN-India Trade in Services Agreement was signed by all Parties on 13 November 2014 and had entered into force on 1 July 2015. The ASEAN-India Investment Agreement was signed by all Parties on 12 November 2014.

Priority Areas of Cooperation

Under the Framework Agreement, ASEAN and India prioritise the following areas:

- **Trade Facilitation:**

1. Mutual Recognition Arrangements, conformity assessment, accreditation procedures, and standards and technical regulations;
2. non-tariff measures.
3. customs cooperation
4. trade financing; and
5. business visa and travel facilitation.

- **Sectors of Cooperation:**

1. agriculture, fisheries, and forestry;
2. services: media and entertainment, health, financial, tourism, construction, business process outsourcing, environmental;
3. mining and energy: oil and natural gas, power generation and supply;
4. science and technology: information and communications technology, electronic commerce, biotechnology;
5. transport and infrastructure: transport and communication;
6. manufacturing: automotive, drugs and pharmaceuticals, textiles, petrochemicals, garments, food processing, leather goods, light engineering goods, gems and jewellery processing;
7. human resource development: capacity building, education, technology transfer; and others: handicrafts, small and medium enterprises, competition policy, Mekong Basin Development, intellectual property rights, government procurement.

- Trade and Investment Promotion:

1. fairs and exhibitions;
2. ASEAN-India weblinks; and
3. business sector dialogues.

5.5 SUMMARY

In this module, we studied the meaning of the term economic integration. It is a process by which counties combine economically to create a larger economy. The objectives for economic integration is to create larger market through international specialization, Larger output, mobility of

labor. Economic integration takes various forms. Under preferential trade agreement, member countries lower tariffs on imports from each other. Under free trade, member countries eliminate completely both tariff and other trade restrictions among themselves. Under custom union, the member countries abolish all tariffs and other trade barriers among themselves. The common market involves the abolition of tariff and trade restrictions among the member countries and adoption of a common external tariff. Economic Union is where countries create single economic unit. European Union is an example of economic union. The Treaty of Maastricht established the European Union common market in 1993.The EU's main economic engine is the single market. It enables most goods, services, money, and people to move freely throughout most of the continent. In 2016, Great Britain voted to leave the European Union. This is known as BREXIT. ASEAN is an integration of 10 south Asian countries. It has been created with the aim to accelerate the economic growth, social progress and cultural development in the region.

5.6 QUESTIONS

1) What is meant by international economic integration? Discuss the types of international economic integration.
2) Discuss the objectives of international economic integration.
3) Discuss the advantages of international economic integration.
4) Discuss the various aspects of the Brexit
5) What are the causes of Brexit?
6) What are the objectives of forming European Union?
7) What are the achievements of European Union?
8) Discuss the fundamental principles and vision of ASEAN .
9) Discuss the aims of ASEAN

Module 3

6

BALANCE OF PAYMENTS AND INTERNATIONAL ECONOMIC ORGANIZATION

Unit Structure:

6.0 OBJECTIVES

1) To understand the meaning and structure of Balance of Payment

2) To study the types of disequilibrium in Balance of Payment

3) To analyse the causes of disequilibrium in Balance of Payment

6.1 MEANING AND STRUCTURE OF BOP

6.1.1 Meaning of Balance of Payments (BOP):

The balance of payments (BOP) of a country is a systematic record of alleconomic transactions between the residents of a country and therest of the world. The balance of payments is a consolidated account of the receipts and payments from and to other countries arising out of all economic transactions during the year.

In the words of C. B. Kindleberger; "The balance of payments of a country is a systematic record of all economic transactions between the residents of the reporting and the residents of the foreign countries during a given period of time."

The International Monetary Fund defines BOP as a "statistical statement that subsequently summarises, for a specific time period, the economic transactions of an economy with the rest of the world."

Features of Balance of Payment Account:

(i) It is a systematic record of all economic transactions between residents of one country and rest of the world.

(ii) It includes all transactions in goods (visible items), services (invisible) and capital during a period of time.

(iii) It is constructed on double entry system of accounting. Thus, every international transaction will result in credit entry and debit entry of equal size.

(iv) All economic transactions that are carried out with the rest of world are either credited or debited.

(v) In accounting sense total debit will always be equal to total credits, i.e., balance of payments will always be in equilibrium. But in economic sense, if receipts are larger than payments, there is surplus in BOP. Similarly, if payments are larger than receipts, there is deficit in BOP.

6.1.2 Structure of BOP Accounts:

According to the broad nature of the transactions concerned, the BOP of a country is divided into four parts: (i) the current account, (ii) the capital account, (iii) errors and omissions and (iv) official reserve account.

Structure of Balance of Payment

1.	Current Account	
	a) Balance of Trade	Export of Goods Import of Goods
	b) Invisible Trade	Export of services Import of services
	c) Other Flows	Investment Income Unilateral Transfers
2.	Capital Account	Long Term Capital Transaction Short Term Capital Transaction
3.	Errors and Omissions	
4.	Official Reserve Account	

1.The Current account:

The current account of BOP includes all transaction arising from trade in goods and services, from income accruing to capital by one country and invested in another and from unilateral transfers, both private and official.

The current account is divided in three parts:

a) The first of these is called Balance of trade or visible account or merchandise account. This account records imports and exports of physical goods. The balance of visible exports and visible imports is called balance of visible trade or balance of merchandise trade

b) The second part of the account is called the invisibles account since it records all exports and imports of services. The balance of these transactions is called balance of invisible trade. It includes freights and fares of ships and planes, insurance and banking charges, foreign tours and education abroad, transactions out of interest and dividends on foreigners' investment, and so on.

c) Investment income consists of interest, profit and dividends on bonus and credits. Unilateral Transfer include grants, gifts, pension, etc.

2. The Capital account*:*

The capital account shows transactions relating to the international movement of ownership of financial assets. It refers to cross-border movements in foreign assets like shares, property, or direct acquisitions of companies' bank loans, governments securities, etc. In other words, capital account records export and import of capital from and to foreign countries.

The capital account is divided into two main parts one is the short term and another is the long-term movements of capital. A short-term capital is one which matures in one year or less, such as bank accounts. A long-term capital is one whose maturity period is longer than a year, such as long term bonds or physical capital.

Long term capital account is, again of two categories: direct investment and portfolio investment. Direct investment refers to expenditure on fixed capital formation, while portfolio investment refers to the acquisition of financial assets like bonds, shares, etc.

3. Errors and omissions:

Since BOP always balances in theory, all debits must be offset by all credits and vice versa. In practice, rarely it happens particularly because statistics are incomplete as well as imperfect. That is why errors and omissions are considered so that BOP accounts are kept in balance.

4. The official reserve account:

The total of 1,2 3 and 4 comprises the overall balance. The category of official reserve account covers the net amount of transactions by government. This account covers purchases and sales of reserve assets (such as gold, convertible foreign exchange and special drawing rights) by the central monetary authority.

BOP can be summarized as:

Current account balance + Capital account balance + Reserve balance = Balance of Payments

The equilibrium in BOP or Basic Balance: Overall, the BOP accounts will always balance inaccounting sense. They must balance as any flows of foreign exchange on payment sideshould match flow of foreign exchange on receipt side. This is so because under double entrybookkeeping system, the credit and debit transactions are equal to each other.

Disequilibrium in BOP: Though the balance of payment always balances in accounting sense, inreality, the BOP will be in disequilibrium due to difference in current and capital account. A disequilibrium in the balance of payment means a condition ofSurplus or deficit.

A Surplus in the BOP occurs when Total Receipts exceeds TotalPayments. Thus, BOP= CREDIT>DEBIT.

A Deficit in the BOP occurs when Total Payments exceeds TotalReceipts. Thus, BOP= CREDIT<DEBIT.

Autonomous and Accommodating Movement: There are two types of transaction in Balance of payment. Autonomous and Accommodating. Autonomous transactions are those which takes place irrespective of the transactions in other items of the BOP. All transaction in the current andcapital accounts are autonomous transactions since they are independent of other transaction inthe BOP and are influenced by income and profit consideration. The transaction like exportand import of goods and services, Foreign Direct Investment are included in this. Accommodating transaction on the other hand are dependent on other transaction in BOP.They are undertaken to offset the deficit or surplus in the capital or current account. Theytake place when disequilibrium occurs in the autonomous transactions. The deficit or surplushas to be balanced with the help of accommodating flow. They are in the form of loan orforeign aid from foreign country. They are utilized to balance the deficit or surplus in theBOP and maintain the overall equilibrium of BOP.

6.2 TYPES OF DISEQUILIBRIUM

Main types of disequilibrium in the balance of payments are:

i. Short-run Disequilibrium

ii. Long-run Disequilibrium

iii. Cyclical Disequilibrium

iv. Structural Disequilibrium

i. **Short run Disequilibrium**: It is a disequilibrium that prevails for a year or more. They occur due to a sudden change in demand for foreign goods and services. Domestic problems like natural calamities of

financial crisis may result in increase in imports or decline in exports. Such imbalances are temporary in nature, and they can be corrected through short term borrowings or other adjustments in the capital account.

ii. **Long-run Disequilibrium**: The long-term disequilibrium thus refers to a deep- rooted, persistent deficit or surplus in the balance of payments of a country. It is secular disequilibrium emerging on account of the chronologically accumulated short-term disequilibria — deficits or surpluses. A long-term deficit in the balance of payments of a country tends to deplete its foreign exchange reserves and the country may also not be able to raise any more loans from foreigners during such a period of persistent deficits. In short, true disequilibrium is a long-term phenomenon. It is caused by persistent deep-rooted dynamic changes which slowly take place in the economy over a long period of time. It is caused by changes in dynamic factors such as capital formation, population growth, technological advancement, innovations, etc.

A newly developing economy, for instance, in its initial stages of growth needs huge investment exceeding its savings. In view of its low capital formation, it has also to import a large amount of its capital requirements from foreign countries and its imports thus tend to exceed its exports. These become a chronic phenomenon. And in the absence of a sufficient inflow of foreign capital in such countries, a secular deficit balance of payments may result.

iii. **Cyclical Disequilibrium:** It occurs on account of trade cycles. Depending upon the different phases of trade cycles like prosperity and depression, demand and other forces vary, causing changes in the terms of trade as well as growth of trade and accordingly a surplus or deficit will result in the balance of payments. **Cyclical disequilibrium in the balance of payments may occur because:**

a) Trade cycles follow different paths and patterns in different countries. There are no identical timings and periodicity of occurrence of cycles in different countries.

b) Income elasticities of demand for imports in different countries are not identical.

c) Price elasticities of demand for imports differ in different countries.

In short, cyclical fluctuations cause disequilibrium in the balance of payments because of cyclical changes in income, employment, output and price variables. When prices rise during prosperity and fall during a depression, a country which has a highly elastic demand for imports experiences a decline in the value of imports and if it continues its exports further, it will show a surplus in the balance of payments. Since deficit and surplus alternatively take place during the depression and prosperity phase of a cycle, the balance of payments equilibrium is automatically set forth over the complete cycle.

iv. **Structural Disequilibrium:** It emerges on account of structural changes occurring in domestic economy or abroad which may alter the demand or supply relations of exports or imports or both. Suppose the foreign demand for India's jute products declines because of some substitutes, then the resources employed by India in the production of jute goods will have to be shifted to some other commodities of export. If this is not easily possible, India's exports may decline whereas with imports remaining the same, disequilibrium in the balance of payments will arise. Similarly, if the supply condition of export items is changed, i.e., supply is reduced due to crop failure in prime commodities or shortage of raw materials or labour strikes, etc. in the case of manufactured goods, then also exports may decline to that extent and structural disequilibrium in the balance of payments will arise. Moreover, a shift in demand occurs with the changes in tastes, fashions, habits, income, economic progress, etc. Propensity to import may change as a result. Demand for some imported goods may increase, while that for certain goods may decline leading to a structural change.

6.3 CAUSES OF DISEQUILIBRIUM IN BALANCE OF PAYMENT

Disequilibrium in the balance of payment is the result of imbalance between receipts and payments in current and capital account of the BOP. Disequilibrium in a country's balance of payments position may arise either for a short period or for a long period. Any disequilibrium in the balance of payments arises owing to a large number of causes or factors operating simultaneously. Types of disequilibrium differ from country to country, while the different kinds of disequilibrium and their causes in the same country will differ at different times.

Following are the important causes fordisequilibrium in the balance of payments of a country:

1. Trade Cycles: Cyclical fluctuations generally produce cyclical disequilibrium. Recession or inflation in any of the developed countries can have impact on the rest of the world. The cyclical fluctuations in income, demand, production is transmitted from one country to another. This affects the export of the country causing deficit in the balance of payment.

2. Huge Developmental and Investment Programmes: Huge development and investment programmes in the developing economies are the root causes of the disequilibrium in the balance of payments of these countries. Their propensity to import goes on increasing for want of capital for rapid industrialisation; while exports may not be boosted up to that extent as these is the primary producing countries.

Moreover, their exports of primary commodities may decline as newly-created domestic industries may require them. Thus, there will be structural changes in the balance of payments and structural disequilibrium will result.

3. Changing Export Demand: Improvement in domestic production of essential food grains, raw materials, substitute goods, etc. in advanced countries has reduced their need for import from the primary goods producing underdeveloped countries. Thus, export demand has considerably changed, resulting in structural disequilibrium in these countries.

Similarly, advanced countries also suffer from fall in exports earnings as a result of loss of their markets in developing countries owing to the tendency of these nations for self-reliance and their ways and means of curtailing their imports. But disequilibrium (deficit) in balance of payments seems to be more persistent in the underdeveloped or developing nations than in the advanced rich nations.

4. Population Growth: High population growth in underdeveloped countries adversely affects their balance of payments position. It is easy to see that an increase in population increases the needs of these countries for imports of essential goods and decreases the capacity to export.

5. Huge External Borrowings: Another reason for a surplus or deficit in the balance of payments arises out of international borrowing and investment. A country may tend to have an adverse balance of payments when it borrows heavily from another country, while the lending country will tend to have a favourable balance and the receiving country will have a deficit balance of payments.

6. Inflation: Owing to rapid economic development, the resulting income and price effects will adversely affect the balance of payments position of a developing country. With rising income, the marginal propensity to import is high in these countries. This causes their demand for imported goods to rise.

Since marginal propensity to consume is also high in these countries, people's demand for domestic goods also will rise, and hence less may be available for export. Moreover, a huge investment in heavy industries in the developing countries may have an inflationary impact, as the output of these industries will not be forthcoming immediately, whereas money income will have been already expanded. Thus, there will be an excess of monetary demand for goods and services in general which will push up the price levels. A rise in the comparative price level certainly encourages imports and discourages exports, resulting in a deficit balance of payments.

7. Demonstration Effect: Demonstration effect is another most important factor causing deficit in the balance of payments of a country — especially of an underdeveloped country. When people of underdeveloped nations are influenced by advanced countries through economicor social relations, there will be demonstration effect on the consumption pattern of these people and they will desire to adopt western pattern of consumption so that their propensity to import increases, whereas their export earnings may remain the same or may even decline with the increase in income, thus causing an adverse balance of payments for the country.

8. Reciprocal Demands: Since intensity of reciprocal demand for products of different countries differs, terms of trade of a country may be set differently with different countries under multi-trade transactions which may lead to disequilibrium in a way.

9. Globalization: In the recent years, Globalization has led to increase in movement of goods and services and foreign investment. The competitive environment created due to globalizationhas led to disequilibrium in balance of payment of some countries.

6.4 SUMMARY

In this module, we have studied the structure of Balance of Payment. BOP is a tabular representation of economic transaction with the rest of the world. It consists of four parts: Current account, Capital account, errors andomissions and official reserve account. The current account consists of export and import of goods and services while capital account consists of transactions in financial assets. BOP is based on double entry book keeping system. Under this system, the debit and credit side should be equal. In accounting sense, total debit will always be equal to total credits, i.e., balance of payments will always be in equilibrium. But in economic sense, if receipts are larger than payments, there is surplus in BOP. Similarly, if payments are larger than receipts, there is deficit in BOP. There are different types ofdisequilibrium caused by short term factors, long term factors, cyclical factors and structural changes. Disequilibriumis caused by various factors like population growth, inflation, trade cycles, investment demand and globalization.

6.5 QUESTIONS

1) Explain the concept and structure of Balance of Payment.
2) Explain in detail the Current and Capital Account of the Balance of Payment.
3) Explain the concept of autonomous and accommodating flows under BOP.
4) Balance of payment always balances. Discuss.
5) Explain the causes of disequilibrium in Balance of Payment.
6) Discuss the different types of disequilibrium in BOP

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7

TRENDS IN WORLD TRADE AND WTO

Unit Structure:

7.0 OBJECTIVES

1) To analyse the measures to correct the disequilibrium in Balance of Payment.

2) To study the principles and functions of WTO

3) To discuss the TRIPs, TRIMs and GATs agreement.

4) To analyse the impact of WTO on developing countries like India.

7.1 MEASURES TO CORRECT DISEQUILIBRIUM IN BALANCE OF PAYMENT

1) Expenditure reducing polices:

The important way to reduce imports and thereby reduce deficit in balance of payments is toadopt monetary and fiscal policies that try to reduce aggregate demand in theeconomy. The fall in aggregate demand in the economy works toreduce imports and help in solving the balance of payments problem.

The two important instruments of reducing aggregate demand are the use of:

(1) Tight monetary policy and
(2) Concretionary fiscal policy.

Tight Monetary Policy:

Tight monetary is used to check aggregate demand by raising the cost ofbank credit and restricting the availability of credit. For this bank rate is

raised by the CentralBank of the country which leads to higher lending rates charged by the commercial banks. This discourages businessmen to borrow for investment and consumers to borrow for buyingdurable consumers goods. This therefore leads to the reduction in investment and consumption expenditure. Besides, availability of credit to lend for investment and consumption purposes is reduced by raisingthe cash reserve ratio (CRR) of the banks and undertaking of open market operations (selling Government securities in the open market) by the Central Bank of the country. This also tends to lower aggregate demand which will helps in reducing imports.

Contractionary Fiscal Policy:

Fiscal policy is also an important means of reducing aggregate demand. Anincrease in direct taxes such as income tax will reduce aggregate demand. A part ofreduction in expenditure may lead to decrease in imports. Increase in indirect taxes such asexcise duties and sales tax will also cause reduction in demand. The other fiscal policy measure is to reduce Government expenditure, especiallyunproductive expenditure. The cut in Government expenditure will notonly reduce expenditure directly but also indirectly through the operation of multiplier. It may be noted that if tight monetary and contractionary fiscal policies succeed in lowingaggregate expenditure which causes reduction in prices or lowering the rate of inflation, theywill work in two ways to improve the balance of payments. First, fall in domestic prices will induce people to buy domestic products rather than imported goods. Second, lower domestic prices will stimulate exports. Fall in imports and rise in exports will help in reducing deficit in balance of payments. However, it may be emphasized again that the method of reducing expenditure through contractionary monetary and fiscal policies is not without limitations. If reduction in aggregate demand lowers investment, this will adversely affect economic growth. Thus, correction in balance of payments may be achieved at the expense of economic growth.

2) Expenditure – Switching Policies: Devaluation:

Another method which used for correcting disequilibrium inbalance of payments is the use of expenditure-switching policies. Expenditure switchingpolicies work through changes in relative prices or through exchange rates. Prices of imports are increased by makingdomestically produced goods relatively cheaper. Expenditure switching policies may lowerthe prices of exports which will encourage exports of a country. In this way by changingrelative prices, expenditure-switching policies help in correcting disequilibrium in balance ofpayments. The important form of expenditure switching policy is the reduction in foreign exchange rateof the national currency, namely, devaluation. By devaluation we mean reducing the value orexchange rate of a domestic currency with respect to other foreign currencies. Devaluation takes place when a country is under fixed exchange rate systemand occasionally decides to lower the exchange rate of its currency to improve its balance of payments. On the other hand, in the present flexible exchange rate system, its exchange rate as

determined by demand for and supply of currencies. Fall in the value of a currency with respect to foreign currencies as determined by demand and supply conditions is described as depreciation. As a result of reduction in the exchange rate of a currency with respect to foreign currencies, the prices of goods to be exported fall, whereas prices of imports go up. This encouragesexports and discourages imports. With exports so stimulated and imports discouraged, thedeficit in the balance of payments will tend to be reduced.

Marshall Lerner Condition. According to the Marshall Lerner condition, that whether devaluation ordepreciation will lead to the rise in export earnings and reduction in import expendituredepends on the price elasticity of foreign demand for exports and domestic demand forimports. Marshall and Lerner condition states that devaluation will succeed inimproving the balance of payments if sum of price elasticity of exports and price elasticity ofimports is greater than one. Thus, according to Marshall-Lerner Condition, devaluationimproves balance of payments if

$e_x + e_m > 1$

where

e_x stands for price elasticity of exports

e_m stands for price elasticity of imports

If in case of a country $e_x + e_m < 1$, the devaluation will adversely affect balance of paymentsposition instead of improving it. If $e_x + e_m = 1$, devaluation will leave the disequilibrium in the balance of payments unchanged.

3) Direct Measures: The countries may also adopt direct measures which will help to restrict imports or promote exports to bring equilibrium in the Balance of payment.

a) Tariffs: Tariffs are duties (taxes) imposed on imports. When tariffs are imposed, the prices of imports would increase to the extent of tariff. The increased prices will reduce the demand for imported goods and at the same time induce domestic producers to produce more of import substitutes.

b) Quotas: Under the quota system, the government may fix and permit the maximumquantity or value of a commodity to be imported during a given period. By restricting importthrough the quota system, the deficit is reduced and the balance of payments position isimproved.

c) Export promotion: Exports may be encouraged by reducing export duties and lowering the interest rate on credit used for financing exports. Exports are also encouraged by granting subsidies to manufacturers and exporters. Besides, on export earnings lower income tax can be levied to provide incentives to the exporters to produce and export more goods and services. By imposing lower excise duties, prices of exports can be reduced to make them competitive in the world markets.

d) **Exchange Control**: Under it, all the exporters are ordered to surrender their foreign exchange to the central bankof a country, and it is then rationed out among the licensed importers. No one else is allowed toimport goods without a license. The balance of payments is thus rectified by keeping theimports within limits

7.2 PRINCIPLES AND FUNCTIONS OF WTO

7.2.1 Introduction

The **World Trade Organization** (**WTO**) is an intergovernmental organization that regulates and facilitates international trade. Governments use the organization to establish, revise, and enforce the rules that govern international trade. It officially commenced operations on 1 January 1995, thus replacing the General Agreement on Tariffs and Trade (GATT) that had been established in 1948. The WTO is the world's largest international economic organization, with 164 member states representing over 98% of global trade and global GDP.

The WTO facilitates trade in goods, services and intellectual property among participating countries by providing a framework for negotiating trade agreements, which usually aim to reduce or eliminate tariffs, quotas, and other restrictions; these agreements are signed by representatives of member governments and ratified by their legislatures. The WTO also administers independent dispute resolution for enforcing participants' adherence to trade agreements and resolving trade-related disputes The organization prohibits discrimination between trading partners, but provides exceptions for environmental protection, national security, and other important goals.

7.2.2 Principles of WTO

WTO has a framework of policies binding to all member nations. The trading principles aim to encourage free movement of goods and services among member nations. The principle of WTO are as follows.

1) **Non-discrimination**: It has two major components: the most favoured nation (MFN) rule and the national treatment policy. Both are embedded in the main WTO rules on goods, services, and intellectual property, but their precise scope and nature differ across these areas.

2) **Most Favoured Nation:** All member nations are granted the status of most favoured nation. This implies that all member nations are treated equally. Any trade concession given to one member country has to be given to the others. MFN ensures equal treatment for products offered among WTO members.

3) **National Treatment:** It forbids discrimination between the member's own nationals and the national of other members. The foreign products should be given same treatment as the identical domestic products.

4) **Freer trade**: WTO aims towards trade liberalization by removing trade barriers. The WTO aims at free trade by lowering or removing tariff rates and custom duties. The idea is to open markets through progressive liberalization.

5) **Promoting fair competition**: WTO principles aims to promote competition in a global market. WTO has allowed reduction in the tariff, but member countries have rights to lay countervailing duties on imports that have been subsidized.

6) **Prediction through binding and transparency**: WTO members are required to bind their commitments to the trading process. This gives market a clear picture of future opportunities which encourages investment, trade and brings more stability , transparency and predictability.

7) **Encouraging social development and economic reforms**: WTO Principles are structured in a manner that supports developing countries in their social and economic reforms through special assistance and flexibility in time to implement WTO agreements. The aim is to bring developing nations at par with the global trading market.

7.2.3 Functions of WTO

1) **Facilitating implementation of agreement:** WTO facilitates the implementation, administration, and operation of the multilateral trade agreement. It provides framework for implementation and administration of Plurilateral Trade agreements.

2) **Forum for negotiation**: The WTO provides opportunities to members to negotiate and have trade arrangements among themselves.

3) **Settlement of disputes**: The member countries may enterinto trade disputes on various issues.WTO administers the understanding on Rules and Procedures governing the settlement of disputes.

4) **Trade policy review mechanism**: WTO administers the Trade policy review mechanism.WTO Provides framework for the conduct of trade relation among member nations.

5) **WTO co-operation with other institutions**: In order to enable coherence economic policymaking, WTO co-operates with other institutions like IMF and the World Bank. This enablescoherent and meaningful policies.

7.3 STUDY OF TRIPS, TRIMS AND GATS AGREEMENT

7.3.1 The agreement on Trade related aspects of Intellectual property rights (TRIPs)

The TRIPS Agreement makes protection of intellectual property rights an integral part of the multilateral trading system, as embodied in the WTO. The agreement is often termed one of the three "pillars" of the WTO, the other two being trade in goods and trade in services.

Before TRIPS, the extent of protection and enforcement of IP rights varied widely across nations and as intellectual property became more important in trade, these differences became a source of tension in international economic relations. Therefore, it was considered prudent to have new trade rules for IP rights in order to have more order and predict ability, and to settle disputes in an orderly manner. The agreement on Trade related aspects of Intellectual property rights (TRIPs) introduced intellectual property rules into the WTO multilateral trading system for the first time. The IPRs are increasingly important part of international trade. They take a number of forms suchas copyrights, Patent, trademarks, geographical indications, industrial design, layout designs. In respect of each of the main areas of intellectual property covered by the TRIPS Agreement, the Agreement sets out the minimum standards of protection to be provided by each Member. Developed countries are mostly the owners of intellectual property while they are used byboth developed and developing countries. The TRIPs agreement provides norms andstandards for implementation of IPR rules. Under TRIPs agreement, every country is requiredto build adequate procedures and remedies into its domestic laws to ensure the effectiveenforcement of IPRs. Disputes over the TRIPs agreement are to be governed under the WTOdispute settlement procedures. Under the WTO agreement, developed countries were given 1year to ensure compliance with TRIPs agreement from 1st January 1995. Developingcountries were given 5years until 2000. LDCs has been given 11 years untill2006 which hasextended to 2016 for pharmaceutical patents.

Impact on developing countries:

1. It may result in increase in prices on products like pharmaceutical and chemicals.
2. It will have a favourable effect on the supply of innovations.
3. Developing countries can become the producers of new technologies.
4. The TRIPs agreement could help in transfer of Research and Development from developed to developing countries.

7.3.2 The trade related investment measures (TRIMs)

TRIMs believe that there is a strong connection between trade and investment. The goal of trade-related investments measures is to give fair treatment to all investing members across the world. As the TRIMs deal

says, members have to inform the World Trade Organization (WTO) council to buy and sell various services and goods of their current TRIMs that are incompatible with the agreement.

The trade related investment measures prohibits investment measures which are inconsistent with national treatment or prohibition of quantitative restrictions. Other measures such as local equity requirement, participation of local employees in the foreign firms, remittance restrictions on the profits of foreign firms, foreign exchange restrictions , technology transfer requirements etc are considered as deterrent from the investment point of view.

Main Features of TRIMs

- It only applies to investment measures related to goods trade.
- This doesn't apply to service trade.
- It doesn't regulate the entry of foreign industry or investment.
- It is about the discriminatory treatment of imported/ exported products.
- Concern measures were applied to both foreign domestic firms.
- A transition period of 2 years in the case of developed countries, 5 years in the case of developing countries and 7 years in the case of LDCs, from the date this agreement came into effect, which is 1st January 1995.

The main obligation contained in this agreement is that members shall not apply any trade-related investment measure that is inconsistent with national treatment or general elimination of quantitative restrictions. The developing countries are permitted to deviate from the complying the TRIMsagreement temporarily due to BOP problemsOn request, the council for trade in Goods may extend the transition period from theelimination of TRIMs for developing countries including least developed countries.

7.3.3 The general agreement on Trade in services (GATs)

While services currently account for over two-thirds of global production and employment, they represent no more than 25 per cent of total trade. Furthermore, even though services are increasingly traded in their own right, they also serve as crucial inputs into the production of goods and, consequently, when assessed in value-added terms, services account for about 50 per cent of world trade. The creation of the GATS was one of the landmark achievements of the Uruguay Round, whose results entered into force in January 1995. The GATS was inspired by essentially the objectives of creating a credible and reliable system of international trade rules; ensuring fair and equitable treatment of all participants (principle of non-discrimination); stimulating economic activity through guaranteed policy bindings; and promoting trade and development through progressive liberalization.

The GATs is based on two requirements. The first is non-discrimination and second is transparency. GATs provide a set of multilateral rules which should govern trade in services under condition of transparency and progressive liberalization. GATs cover all the service sector. It includes an obligation to provide national treatment and market access to service providers of other members. The GATS promotes increasing participation of developing countries in world trade in services. The developing countries are given flexibility to pursue their own developmental priorities and to decide which sector to liberalize in further negotiation. Developing countries have started reforming their service sector in order to take advantage of opportunities created by GATs. This will benefit these countries and help in the growth of developing countries.

7.4 IMPACT OF WTO ON DEVELOPING COUNTRIES LIKE INDIA

Benefits (Advantages)

1) **Benefit from increased international trade**: According to World Bank, the merchandise trade for countries like India will increase. The increase in trade will be due to increase in items like clothing, agricultural products, food products. In many of these products, India has an advantage as India has the potential to produce and export these products in the international market. India will benefit from increased export of textiles and clothing items.

2) **Reviewing policies**: The establishment of WTO strengthened the mechanism for reviewing policies, implementing rules and settling dispute among trading partners. These steps will help countries to break barriers and enter international markets for exports.

3) **Tariff reduction**: There will be substantial tariff reduction in industrial goods which will benefit countries like India. Developing countries will get access to the markets of the developed countries .

4) **GATs agreement**: GATs lays down the framework to define multilateral rights and obligation in the area of services. GATS is the first step in defining rights and obligation in trade in services. This will benefit countries like India.

5) **TRIPs and TRIMs**: The agreement on TRIPs and TRIMs has helped in curbing the use of non-tariff barriers and strengthened the rules relating to anti-dumping, countervailing measures and the use of safeguard measures.These will be favourable for countries like India.

Disadvantages

1) **TRIMs**: For developing countries like India, the provisions of TRIMs agreement is against the strategy of self-reliant growth. Removal of restriction on foreign investment can result in MNCs trying to control important industries in developing countries. The domestic industries may suffer as a consequence of TRIMs agreement.

2) **TRIPs**: The TRIPs agreement may not benefit the developing countries as it would lead to increase in the prices of pharmaceutical products if the TRIPs agreement is implemented in full. Thus the protection of intellectual property rights with the help of patents, copyrights, trademarks will be helpful to the developed countries. Patenting of new plant varieties will lead to transfer of gains to the MNCs.

3) **GATs**: GATs gives importance to the liberalization of only those services such as financial, shipping, transport and communication, health. In those areas, the developing countries have to face unequal competition from the developed countries.

4) **Inequality in the structure of WTO**: The arguments decided under WTO rules favour the rich developed countries. The developing countries have to accept them. This is unfair since the burden of adjustments have to be borne by the developing countries. The Dispute settlement mechanism favours the rich countries which is not helpful for the developing countries.

7.5 SUMMARY

In this module, we have seen the various measures adopted by countries to correct the disequilibrium in the Balance of Payment. It includes using contractionary monetary and fiscal policies to reduce deficit in balance of payment. Countries adopt expenditure switching policies like Devaluation to correct deficit in BOP. Other measures include tariffs, quotas, export promotion methods, import substitution and exchange control. The **World Trade Organization** (**WTO**) is an inter governmental organization that regulates and facilitates international trade. Governments use the organization to establish, revise, and enforce the rules that govern international trade. It officially commenced operations on 1 January 1995, thus replacing the General Agreement on Tariffs and Trade (GATT) that had been established in 1948. The WTO is the world's largest international economic organization, with 164 member states representing over 98% of global trade and global GDP. It is based on the Principle of Non discrimination and progressive liberalization. The TRIPs Agreement sets out the minimum standards of protection to be provided for safe guarding intellectual property rights. The goal of trade-related investments measures is to give fair treatment to all investing members across the world. GATs cover all the service sector. It includes an obligation to provide national treatment and market access to service providers of other members. The WTO agreements benefits developing countries like India through increased global trade and tariff reduction.

7.6 QUESTIONS

1) Explain the monetary measures to correct disequilibrium in Balance of payment.
2) Discuss the non-monetary measures to correct the disequilibrium in Balance of payment.
3) Explain the concept of devaluation and depreciation in correcting the deficit in Balance of payment
4) Discuss the expenditure switching policy to reduce disequilibrium in balance of payment.
5) What are the important agreements of WTO?
6) Discuss the WTO agreement with respect to TRIPs and TRIMs.
7) Discuss the WTO agreement with respect to GATs and TRIMs.
8) Discuss the WTO agreement with respect to TRIPs and GATs.
9) What are the objectives and Principles of WTO.
10) Discuss the WTO agreement with reference to GATs

Module 4

8

FOREIGN EXCHANGE MARKET

Unit Structure:

8.0 OBJECTIVES

- To understand the need, role of foreign exchange market.
- To know the participants and their role in foreign exchange market.
- To understand the Balance of payment theory and purchasing power parity theory related to exchange rates determination.

8.1 INTRODUCTION

Today in an open economy, every nation is involved in multilateral trade. In previous days there was barter system so no question felt of currencies and their power of purchasing each others units. But today every nation has its own currency to be used within the territory of that nation. Outside the boundaries it does neither have legal tender nor acceptability. So, to carry the functions of export and import smoothly it is essential to have arrangement for exchanging these currencies through the system and so that transfer becomes possible. This problem of exchange is solved by the foreign exchange market. In this chapter we are going to learn about the foreign exchange market and its related aspects.

8.2 MEANING AND FUNCTION OF FOREIGN EXCHANGE MARKET

Foreign exchange refers to foreign currencies possessed by a country for making payments to other countries. It includes all claims upon foreign currencies. It is a mechanism to the international payments through which payments are made between two counties having different currency systems. This mechanism converts domestic currencies to foreign currencies. It is the international payment mechanism. Foreign exchange includes foreign currency, foreign cheques, and foreign drafts.

Foreign exchange market is the place where currencies are bought and sold. Institutions like the Treasury, Central Bank, Foreign exchange banks etc. involved in the purchase and sale of foreign exchange currencies constitute the foreign exchange market. The transactions in the foreign exchange market viz. buying and selling foreign currency take at a rate, which is called **'Exchange rate'.** This market is not any physical place but a network of communication system connecting the whole complex of institutions including banks, specialized foreign exchange dealers and official government agencies through which the currency of one country can be exchanged for that of another (converted into another).

8.2.1 Functions :

1. Clearing Function:

It is the primary function of the foreign exchange market. The foreign exchange market helps to transfer the purchasing power between countries. This transfer is done by converting domestic currency into foreign currencies and vice-versa. It helps to carry out international payments and transactions. It is also known as money changing function of a foreign exchange market. It helps in transferring purchasing power between two countries. This function plays an important role in promoting international trade along with international capital flow.

2. Credit Function:

The foreign exchange market provides national and international credit to promote foreign trade. International payments may be delayed as exporters and importers may not be able to fulfill their obligations immediately. Bills are discounted for this purpose. Credit function has been the main drive behind the success of foreign trade. While importing goods time is required for the actual delivery of the goods because of shipment and transportation of goods. So the credit in the foreign exchange market.

3. Hedging Function:

Hedging means covering foreign exchange risks arising out of fluctuations in exchange rates. An importer who has to make payments to a foreign country may lose if he expects the price to rise in future. To cover the risk, he may deposit his own funds in the foreign country or buy forward the foreign exchange. It leads to spot markets and forward markets. Hedging

will give rise to a supply of and demand for forward exchange. It is important, especially in a market with flexible exchange rates, as it permits exporters and importers to protect themselves against risks connected with exchange rate fluctuations. It is needed for carrying pure trading functions.

Check your progress :

1. What is hedging?

8.3 INTRODUCTION AND CONCEPT OF FOREIGN EXCHANGE RATE

Domestic trade involves no question of foreign exchange and hence no question of foreign exchange rate because trade remains within the geographical/political boundary of a country and the trade is facilitated through the medium of national currency only. Unlike the domestic trade the international trade involves the participation of two or more than two countries and hence two or more than two currencies come to the forefront. Therefore, there arises the problem of foreign exchange rate.

8.3.1 CONCEPT

The foreign exchange rate is defined as the rate at which the currencies of two countries get exchanged against each other. It is the price of one country ‘s currency in terms of another country‘s currency. For example in U. S. A. Dollar is the domestic currency while in India Rupee is the domestic currency. When international trade takes place between these two countries it leads to payments and receipts. So as to facilitate payments and receipts between these two countries we have to correct one country‘s currency in terms of another country‘s currency which is effected through the medium of foreign exchange rate. If 1 $ = Rs. 45. This foreign exchange rate gets established then it expresses the price of one U.S. dollar in terms of Indian Rupees. i.e. one U.S. Dollar is equal to 45 Indian Rupees.

8.3.2 DETERMINATION OF FOREIGN EXCHANGE RATE:

As per the balance of payments theory there are twin market fares which determine the foreign exchange rate in the foreign exchange market.

Algebraically.

F. E. R. = f (Df, Sf)

F. E. R. stands for Foreign Exchange Rate. f stands for functional relationship.

Df stands for Demand for foreign exchangeSf stands for Supply of foreign exchange.

Demand for foreign exchange:-

Foreign exchange is demanded by the residents of the country for the following reasons:-

1) **Imports of goods:-** It is one of the major reasons for the demand for foreign exchange. Raw materials and semi-finished goods are imported by the residents of the reporting country so as to undertake production of finished goods. It also imports consumer durables, so as to facilitate the consumption of sophisticated, qualitative goods. Capital goods like machinery, spare parts etc. are imported so as to industrialize the economy. All these types of imports require the demand for foreign exchange.

2) **Import of services:-** Services belong to the tertiary sector. Residents of the country demand two types of services viz. a) the services rendered by the individual professionals like traders, lowers, doctors, musicians, dancers, etc. b) The other types services are also demanded which get referred to as institutional services viz. banking, educational services, insurance, transportation, communication, tourism etc. For importing of services of these types foreign exchange gets demanded.

3) **Unilateral Payments:-** In order to make unilateral payments i.e. one sided payments viz. donations, gifts etc one has to demand foreign exchange.

4) **Miscellaneous:-** The miscellaneous items constitute repayment of foreign debt, purchase of assets in foreign countries, direct foreign investment etc. All these miscellaneous items also require the demand for foreign exchange.

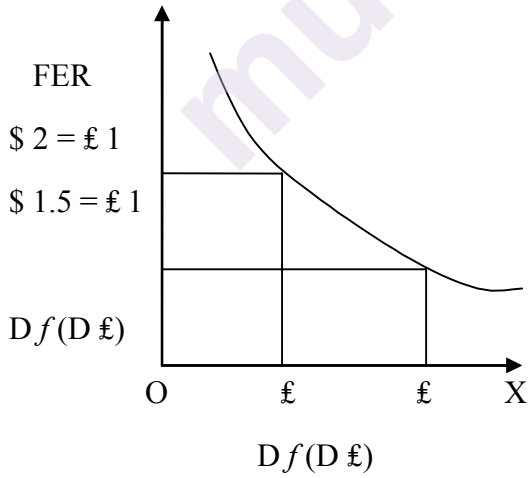

Figure 8.1

The demand for foreign exchange curve is a downward sloping curve which slopes downward from left to right indicating an inverse relationship between the rate of exchange and the demand for foreign exchange. There are two countries viz. USA and England. In the diagram USA's demand for England's pound sterling is shown.

When the foreign exchange rate is $2 = £1 USA demands £ 1000 from England. As the foreign exchange rate falls to $1.5 = £ 1 USA's demand for England's pound sterling rises to £1500.

Supply of foreign exchange:-

The supply of foreign exchange comes out of receipts due to excess of exports over imports. The following are the main sources of supply of foreign exchange:-

1) **Exports of goods:-** It is the main source of receipt and hence the supply of foreign exchange. It depends upon the size and the price of exports. If the size of exports is large price of the exports remaining the same the receipts will be more. The size of the exports remaining the same if the price of exports rises then the receipts will be more. It also depends upon the elasticity of exports.

2) **Export of services:-** Export services include both the types of services viz. the individual professional services and the institutional services. The export of all these types of services earn foreign exchange.

3) **Unilateral or one sided receipts:-** These include donation, gifts, grants etc. This is a sort of an earning of foreign exchange due to which the supply of foreign exchange increases.

4) **Miscellaneous:-** The miscellaneous items which are the source of earning of foreign exchange include direct foreign investment, portfolio investment, repayment of debt etc which form the source of supply of foreign exchange.

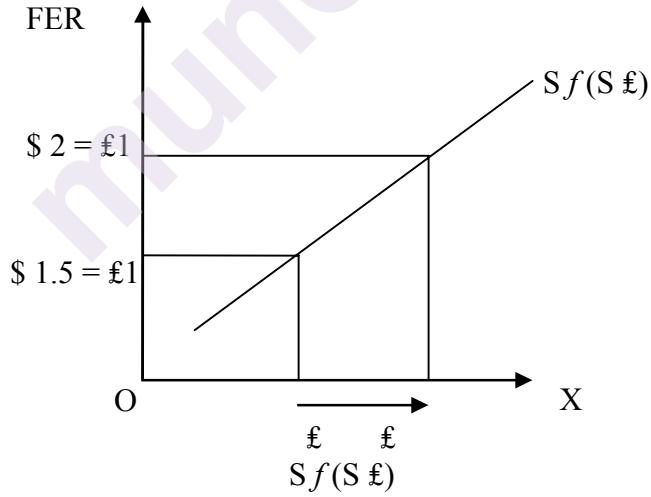

Figure 8.2

The supply of foreign exchange curve is a upward sloping curve which slops upward from left to right. It indicates a positive and direct relationship between rate of exchange and the supply of foreign exchange. When the rate of exchange was $1.5 = £ 1 England used to supply £ 1000. When the rate of exchange shoots up from $1.5 = £ 1 to $2 = £ 1 her supply of foreign exchange shoots up from £1000 to £2000.

The intersection between the demand for foreign exchange curve and the supply of foreign exchange curve determine the equilibrium foreign exchange rate.

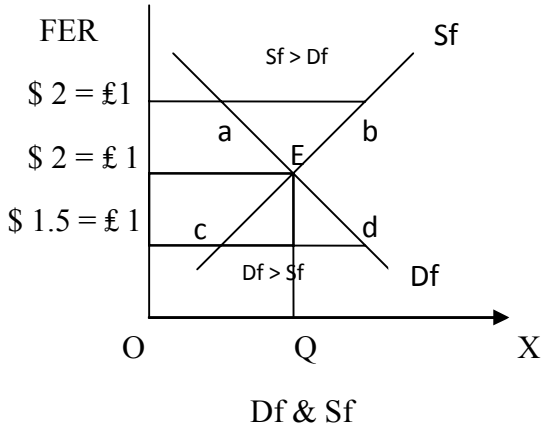

Figure 8.3

Along X axis demand for foreign exchange and supply of foreign exchange are marked while along Y axis foreign exchange rate is marked. Df is a demand for foreign exchange curve which slopes downward from left to right indicating an inverse relationship between the foreign exchange rate and the demand for foreign exchange i.e. at a higher rate of exchange less foreign exchange will be demanded conversely ata lower foreign exchange rate more foreign exchange will be demanded. Sf is the supply of foreign exchange curve which slops upward from left to right establishing a positive and direct relationship between the foreign exchange rate and the supply of foreign exchange. Higher is the foreign exchange rate more foreign exchange will be supplied conversely lower is the foreign exchange rate less foreign exchange will be supplied. Both the demand for foreign exchange curve and the supply of foreign exchange curve intersect at the point 'E' where foreign exchange rate gets determined. If we take a perpendicular line from point E along Y axis, we get point 'R' hence OR will be the equilibrium foreign exchange rate. Supposing if the foreign exchange rate shoots up from OR to OR^1 then supply of foreign exchange exceeds the demand for foreign exchange due to which the foreign exchange rate will fall from OR^1 to OR. Supposing if the foreign exchange rate slows down from OR to OR_2 then the demand for foreign exchange will exceed the supply of foreign exchange by cd amount. Hence there will an upward tendency of foreign the exchange rate i.e. the foreign exchange rate will shoot up from OR_2 to OR. In this way once again the equilibrium foreign exchange rate will be maintained.

The merit of the balance of payments theory of foreign exchange rate is that it has brought the phenomenon of foreign exchange rate under the preview of general equilibrium theory.

The defect of the balance of payments theory of foreign exchange rate lies in the fact that it assumes perfect competition. Nowhere in the world perfect competitionexists. It is the imperfect competition or monopolistic competition which exists everywhere. Secondly it is also assumed that

foreign exchange rate is a function of balance of payments. But there are other forces which influence the foreign exchange rate.

Check Your Progress:

1. Define Foreign exchange rate.

8.4 PARTICIPANTS / DEALERS OF FOREIGN EXCHANGE MARKET

1. Commercial banks :

They carry out buying and selling orders from their clients and of their accounts. They deal with other commercial banks and through foreign exchange brokers. Their role is important in the success of these markets.

2. Retail clients :

These include people, international investors, multinational corporations, and others who need foreign exchange. They deal through commercial banks and authorized agents. They are large in numbers.

3. Brokers :

They are the authorized brokers acting as intermediaries between buyers and sellers, mainly the banks. Their role is major in the success and spread of foreign exchange market.

4. Central banks :

Under the flexible exchange rate the central bank of the nation normally does not interfere in the exchange market. But now they are interfering in the same to influence the rates in order to keep economy unaffected by the trade.

Check your progress :

1. What is foreign exchange market?
2. Who participate in foreign exchange market to activate it?

8.5 CAUSES FOR THE FLUCTUATIONS IN EXCHANGE RATES

1. Trade Movements:

Changes in imports and exports will cause a change in the rate of exchange. If import exceeds exports, the demand for foreign currency rises and rate of exchange will be unfavorable to the country favourable balance of payments will raise the exchange value of the currency and vice- versa.

2. Price Trends:

Prices trends in the domestic economy may bring abut fluctuations in exchange rate e.g. inflation will result in rising prices causing falling exports. Therefore, changes in price within the nation brings effect on the exchange rates too. Because price fluctuations directly affects the purchasing power of the consumers for goods and services.

3. Capital Movements:

Export and import of capital will bring about fluctuations in the rate of exchange. The import of capital will result in increased demand for the currency of that country in the foreign exchange market and the exchange value of that currency will rise and vice-versa.

4. Banking operations:

Bank are the major dealers of foreign exchange, the operations of the bank regarding the changes in the bank rate, transfer of funds, accepting foreign bills of exchange, arbitrage etc. affect the demand and hence influence the exchange rates.

5. Political conditions:

Political stability will invite foreign capital and the rate of exchange will move favorably to the country. Political instability will cause a flight of capital resulting in an unfavorable exchange rate for the county.

6. Monetary policy:

An expansionary or contractionary monetary policy may result in inflation or deflation bringing about changes in the internal and external value of money. Tariff policy may also bring about fluctuations in exchange rate.

Check Your Progress :

1. Why do exchange rate fluctuate?

8.6 BALANCE OF PAYMENT THEORY

BOP theory, is also known as the Demand and Supply theory and the General Equilibrium theory of exchange rate, holds that the foreign exchange rate, under free market conditions, is determined by the conditions of demand and supply in the foreign exchange market. Free mechanism of trade is applied here. Thus, according to this theory, the price of a currency (exchange rate) is determined just like the price of any commodity is determined by tree play of the forces of demand and supply.

The value of a currency appreciates when the demand for it increases and depreciates when the demand fall, in relation to its supply in the foreign exchange market. The extent of the demand for and supply of a nation's currency in the foreign exchange market depends on its BOP position. When the BOP is in equilibrium, the supply of and demand for the

currency are equal. But when there is deficit in the BOP, supply of the currency exceeds its demand and causes a fall in the external value of the currency; when there is surplus, demand exceeds supply and causes a rise in the external value of the currency.

8.6.1 Merits of BOP Theory :

- It treats the problem of the determination of rate of exchange as an integral part of the general equilibrium theory.
- It is in line with the general theory of value.
- This theory explains that any disequilibrium in the balance of payments of a country can be corrected through making appropriate adjustment in the rate of foreign exchange by the way of devaluation.
- It shades lights on various factors affecting the exchange rate system.
- It focuses on demand and supply and facilitates equilibrium analysis.

8.6.2 Evaluation :

The BOP theory provides a fairly satisfactory explanation of the determination of the rate of exchange. This theory has the following advantages;

- Unlike the PPP theory, BOP theory recognizes the importance of all the items in the BOP, in determining the exchange rate.
- This demand and supply theory in conformity with the general theory of value-like the price of any commodity in a free market, the rate of exchange is determined by the forces of demand and supply.
- It also indicates that BOP disequilibrium can be corrected by adjustments in the exchange Rate by devaluing or revaluing currency value.
- This theory brings the determination of the rate of exchange within the purview of the General Equilibrium Theory. That is why this theory is also called the general equilibrium theory of exchange rate determination.
- Haberler says that its greatest weakness is that it assumes balance of payments to be fixed quantity.

Check your progress :

1. How exchange rate is determined according to BOP theory?

8.7 PURCHASING POWER PARITY (PPP) THEORY

This theory has been restated by the Swedish economist Gustav Cassel in 1916, exactly in the years following the First World War, when the exchange rates are free to fluctuate, the rate of exchange between two currencies in the long run will be determined by their respective purchasing powers. According to him "the rate of exchange between two

currencies must stand essentially on the quotient of the internal purchasing powers of these currencies."

Thus, according to the purchasing power parity theory, the exchange rate between one currency and another is in equilibrium when their domestic purchasing powers at the rate of exchange are equivalent. E.g. if in India 40 Rs are spent for purchasing 1 kg of apples and in America for the same kg of apples if one dollar is needed to spend, then it is clear that the purchasing power of both currencies is different in their respective nations. In order to make equivalent these currencies with each others units purchasing power will be 1$ = 40Rs.

Once the equilibrium is established, the market forces will operate to restore the equilibrium if there are some deviations. E.g. if the exchange rate changes to 1$ = 42Rs when the purchasing power of these currencies remain stable, dollar holder will convert dollars into rupees because, by doing so, they save Rs. 2 when they purchase a commodity worth $ 1. A change in the purchasing power of currencies will be reflected in their exchange rates. For this purpose the price index is made. It is the parity (equality of the purchasing powers of the currencies which determines the exchange rate.

If there is a change in prices (purchasing power of the currencies), the new equilibrium rate of exchange can be found out by the following formula;
ER = Er x Pd/Pf

Where,

ER = Equilibrium exchange rate

Er =Exchange rate in the reference period

Pd = Domestic price index

Pf = Foreign country's price index

8.7.1 Two versions of PPP:

1. Absolute Version:

Under this version, the exchange rate between the currencies of two nations is established at the point where their purchasing power is equal. It reflects their domestic purchasing power too. It is calculated as

Rate of exchange = PI / PA

Where,

PI = Prices of certain goods in India

PA = Prices of same goods in another country, say USA.

Thing to note is that, the changes in internal price level cause changes in the exchange rate. if inflation is India, then the purchasing power of rupee

in terms of dollars would decline. It is not easy to measure the value of money in absolute terms.

2. Relative Version :

In this method the changes in the purchasing power can be measured by the changes in the indices of domestic prices of the countries concerned. Hence the changes in the equilibrium rate can be measured by the ration of the price indices of the respective countries. In this new equilibrium rate of exchange can be calculated by multiplying the base period of rate exchange by the relative changes in the price levels in the two countries with the help of index numbers.

8.7.2 Evaluation of PPP Theory :

- It is based on the unrealistic assumption that international trade is free from all barriers.
- This theory does not explain the demand for supply of foreign exchange. While in the free economy the rate is determined by the forces of demand and supply of foreign exchange.
- The quality of goods and services may vary from country to country, so comparison of prices without regard to the quality is unrealistic.
- Cost of transport is ignored in this theory.
- It also ignores the impact of international capital movement which affects on the foreign exchange market.
- The price index number includes the price of all commodities and services, including those which are not internationally traded and hence the rate of exchange calculated on the basis of these price indices cannot be realistic.
- It does not consider the significance of the elasticity's of reciprocal demand.
- This theory is good in long run and lacks its significance in short run.

Check your progress:

1. What is PPP theory?

8.8 SUMMARY

1. Foreign exchange refers to foreign currencies possessed by a country for making payments to other countries. It includes foreign currency, foreign cheques and foreign drafts.
2. Foreign exchange market performs Clearing function, Credit function and Hedging function.

3. Commercial banks, retail clients, brokers and central banks are the participants or dealers of the foreign exchange market.

4. BOP theory is also known as the demand and supply theory holds that foreign exchange rate, under free market conditions, is determined by the conditions of demand and supply in the foreign exchange market.

5. According to the Purchasing Power Parity theory, the exchange rate between one currency and another is in equilibrium when their domestic purchasing powers at the rate of exchange are equivalent.

6. Under Absolute version of PPP theory, the exchange rate between the currencies of two nations is established at the point where their purchasing power is equal.

7. In the Relative version of PPP theory the changes in the purchasing power can be measured by the changes in the indices of domestic prices of the countries concerned.

8.9 QUESTIONS

1. What is Foreign Exchange rate? What are its functions?

2. Who are the participants in foreign exchange market ?

3. Explain how demand for and supply of foreign exchange determine the foreign exchange rate.

4. Explain BOP theory of Exchange rate.

5. Explain PPP theory of Exchange rate.

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9

EXCHANGE RATE RISKS AND RISK MANAGEMENT

Unit Structure:

9.0 OBJECTIVES

- To understand spot and forward exchange rate
- To get an idea of various exchange risks faced in forex market
- To understand the measures to guard against foreign risks(Risk Management)
- To know about the role of central Bank in foreign exchange rate management
- To understand the managed flexible exchange rate system of India

9.1 INTRODUCTION

In last unit we learnt about the nature and functions of foreign exchange market and its significance in the development of international trade. In this unit we have to focus on the various risks faced in this market due to change in exchange rates. International trade is sensitive in nature and hence is affected by various factors including domestic or foreign environment. Therefore chances of affecting trade are always high. It also brings impact on exchange rates. It may affect exporter or importer negatively. So risks must be known and those must be managed for the successfulness of foreign trade. This unit focuses more on such risks and their management.

9.2 SPOT AND FORWARD EXCHANGES

The term spot exchange refers to the class of foreign exchange transaction which requires the immediate delivery, or exchange of currencies on the spot. In practice, the settlement takes place within two days in most markets. The rate of exchange effective for the spot transaction is known as the spot rate and the market for such transactions is known as the spot market. It is day to day rate of exchange which is charged on the delivery of goods on spot.

The forward transaction is an agreement between two parties, requiring the delivery at some specified future date of a specified amount foreign currency by one of the parties, against payment of domestic currency by the other party, at the price agreed upon in the contract. The rate of exchange applicable to the forward contract is called the forward exchange rate and the market for forward transactions is knows as the forward market.

The foreign exchange regulations of various countries, generally, regulate the forward exchange transactions with a view to curb speculation in the foreign exchange market. In India, for example, commercial banks are permitted to offer forward cover only with respect to genuine exports and import transactions.

Forward exchange facilities, obviously, are of immense help to exporters and importers as they can cover the risks arising out of exchange rate fluctuations by entering into an appropriate forward exchange contract.

9.2.1 Forward exchange rate :

This rate may be at par, premium or discount.

A) At par :

If the FER quoted is exactly equivalent to the spot rate at the time of making the contract, the forward exchange rate is said to be at par.

B) At premium :

The FER for a currency, say a dollar, is said to be at a premium with respect to the spot rate when one dollar buys more units of another currency, say rupee, in the forward that in the spot market. The premium is usually expressed as a percentage deviation from the spot rate on a par annum basis.

C) At discount :

The FER is determined mostly by the demand for and supply of forward exchange. Naturally, when the demand for forward exchange exceeds its supply, the forward rate will be quoted at premium and, conversely , when the supply of forward exchange exceeds the demand for it, the rate will be quoted at discount. When the supply is equivalent to the demand for forward exchange, the forward rate will tend to be a par.

Check your progress

1. What is the difference between Spot and Forward exchange risk?

9.3 EXCHANGE RATE RISK

One of the important problems a firm with international business may encounter is the currency exchange rate risk. Exchange risk is the probability that a company will be unable to adjust prices and costs to offset changes in the exchange rate.

Fluctuation in exchange risk may cause a loss or profit to a firm. Therefore the risk always prevail in exchange market with subject to often fluctuation in the exchange risk caused due to any factors. There are two sorts of foreign exchange risks or exposures. The term economic exposure refers to the risks arising from economic factors through economic transactions and other economic activities.

Economic exposure may be divided into two parts.

- **Transaction exposure :**

  It arises out of the various types of transactions such as international traded, borrowing and lending in foreign currencies, and the local purchasing and sales activities of foreign subsidiaries that require settlement in a foreign currency.

- **Operating exposure :**

  It arises because currency fluctuation can alter a company's future revenues and costs- that is its operating cash flows. It needs to have long term perspective, considering the firm as an ongoing concern with operations whose cost and price competitiveness could be affected by exchange rate changes.

- **Accounting exposure (Translation Exposure) :**

  It arises from the need, for purpose of reporting and consolidation, to convert the financial statements of foreign operations from the local currencies involved to the home currency. According to change in currency value, foreign exchange translation gains or losses may result. The rules that govern translation are devised by an accounting associated such as the Financial Accounting Standards Board (FASB) in the United States.

Check your progress

1. Find out the difference between Transaction, Operating and Accounting Exposures (Risks).

9.4 FOREIGN RISK MANAGEMENT

A firm need to have strategies for managing currency exchange rate risk. It can be done by many ways as:

CURRENCY SWAPS :

A currency swap refers to a spot sale of a currency combined with a forward repurchase of the same currency as part of single transaction. For example, suppose that Citibank receives as $1 million payment today that its will need in three months, but in the meantime it wants to invest this sum in British pounds, Citibank would incur lower brokerage fees by swapping the $1 million into British pounds with London Barclays Bank as part of a single transaction or deal instead of selling dollars for pounds in the spot market today and at the same time repurchasing dollars for pounds in the forward market for delivery in three months-in two separate transactions. The Swap rate (It is usually expressed on a yearly basis) is the difference between the spot and forward rates in the currency swap.

Most interbank trading involving the purchase or sale of currencies for future delivery is done not by forward exchange contracts alone but combined with spot transactions in the form of currency swaps. There were about $1.8 trillion worth of currency swap outstanding at the end of 1998. Today, about 40% of inter-bank currency trading consists of sport transactions. 10% are forward contracts, and 50% take the form of currency swaps. Thus, the foreign exchange market is dominated by the swap and spot markets.

Example :

A swap contract can be entered in two or more currencies, involving two or more parties. More often than not, banks are intermediaries between twp parties to the swap. A MNC, say Suzuki has borrowed in Japanese yen at a fixed rate. It wants dollars for its operations in India. It can swap its exchange risk by entering into a contract for giving dollars at a floating rate or fixed rate, for yen, it has got at affixed rate. If it wants both exchange risk hedge and interest rate hedge, Suzuki might surrender its yen loan at a loan at a floating rate to a dollar loan at a fixed rate. Currency swap is a contract or agreement and is not a loan by itself.

Economic advantage :

Swaps provide real economic advantages to both the parties to the swap. Otherwise, swap will not take place. Currency swaps saves in costs, promote liquidity and depth in the markets and or provide a hedge to the risk that the parity is exposed to. Currency swaps are used to help financing the long-term requirements of funds for projects of MNC's. In many foreign courtiers, long term capital forward foreign exchange markets are absent and not well developed. In this scenario swaps are useful as special purpose vehicles and not well developed. In this scenario swaps are useful as special purpose vehicles for meeting the financial needs of MNC's and for providing liquidity to thee markets.

Exchange Risk Avoidance :

It is the elimination of exchange risk by doing business locally. The adverse effects of devaluation (reduction in the value of the home currency) can be mitigated by procuring the item domestically if devaluation has made domestic good cheaper than foreign. Devaluation always encourages import substitution.

Currency diversification :

It is spreading financial assets across several or more currencies so that exchange rate movements of different currencies may be evened out.

Diversify sourcing :

It is another strategy to change the source of purchasing. For example if US goods become costlier because of dollar appreciation, change the source of purchase from the US to countries where the product is cheaper, either because of depreciation of their currencies or other reasons.

Hedging :

Hedging means covering foreign exchange risks arising out of fluctuations in exchange rate. An importer who has to make payments to a foreign country may lose if he expects the price to rise in future. To cover the risk, he may deposit his own funds in the foreign country or buy forward the foreign exchange. It leads to spot markets and forward markets. Hedging will give rise to a supply of and demand for forward exchange. It is important, especially in a market with flexible exchange rates, as it permits exporters and importers to protect themselves against risks connected with exchange rate fluctuations. It is needed for carrying pure trading functions.

Future rate agreement :

It an agreement between two parties, requiring the delivery at some specified future date of a specified amount of foreign currency by one of the parties, against payment in domestic currency by the party, at the price agreed upon in the contract. This agreed rate is known as **forward exchange rate.** It is useful for importer and exporter for covering risks arising out of rate fluctuation.

Future :

It is similar to forward exchange rate, but actually it has standardized features- the contract size and maturity dates are standardized. Futures can be traded only on an organized exchange and they are traded competitively. While the forward contracts are customized.

Options :

It combines advantages of futures and spot. An option is a contract or financial instrument that gives holder the right, but not the obligation, to sell or buy a given quantity of an asset at a specified price at a specified

future date. An option to buy the underlying asset is known as a call option, and an option to sell the underlying asset is known as pull option.

Check the progress :

1. What is Hedging?
2. What is Currency Swap?
3. What is difference between Forward exchange rate and Future options?

9.5 ROLE OF CENTRAL BANK IN FOREIGN EXCHANGE RATE MANAGEMENT

Central banks, as the monetary authority of a country's economy, are responsible for regulating and monitoring the banking system in the country. Being the "lender of last resort" central banks are responsible for maintaining sufficient reserves and formulate monetary policy in such a manner so as to ensure commercial banks that there will not be a supply shortage of money to avoid financial crisis. Central banks, also plays an important role in the forex market. Open market operations and interest rate policies of central banks influence currency rates to a very large extent.

Central bank performs following main functions in foreign exchange market:

1) To Regulate the market: The Central Bank do not directly control or influence the foreign exchange market. The Central Bank influences inflation and exchange rate by increasing or decreasing the interest rate in the country through its monetary policy.

2) To Manage foreign exchange reserves: Depending upon the economic situation in the foreign exchange market, Central Bank buys or sell foreign currency as against the domestic currency. Central Bank tries to control the value of domestic currency in the foreign exchange market to control the over-valuation or under-valuation of the domestic currency.

3) To control circulation of money supply: In order to control the liquidity of money in the economy Central Bank decides the money supply in circulation. Because it has a greater impact on the appreciation and depreciation of domestic currency in the foreign exchange market.

9.6 MANAGED FLEXIBLE EXCHANGE RATE SYSTEM OF INDIA

There are three types of exchange rate systems prevailed in the world,

a) Fixed exchange rate system,
b) Flexible or floating exchange rate system
c) Managed flexible or floating exchange rate or Managed flexibility

The exchange rate refers to the arrangement to exchange the different country's currencies in the foreign exchange market. In the post Independence period, India have adopted a par value system which was fixed against gold in 1947. This par exchange rate system against the basket of several countries currencies continued till 1971. In late 80's and 90's India faced severe balance of payments difficulties. To encounter these difficulties, a High level Committee on Balance of Payments was formed under the Chairmanship of C. Rangarajan. With regard to the exchange rate policy, the committee recommended that consideration be given to

(i) a realistic exchange rate
(ii) avoiding use of exchange mechanisms for subsidization
(iii) maintaining adequate level reserves to take care of short-term fluctuations
(iv) continuing the process of liberalization on current account
(v) reinforcing effective control over capital transactions

The Committee also recommended to unify the exchange rate, as an important step towards full convertibility. To move towards the market determined exchange rate, the Liberalised Exchange Rate Management System (LERMS) was adopted in March 1992 which involves dual exchange rate system. Then the dual exchange rate system was again replaced by unified exchange rate system in March 1993.

In this way, India adopted managed flexible exchange rate system in which exchange rate is determined in the foreign exchange market through buying and selling of currencies by individuals and the institutions. But during the time of extreme fluctuations, Reserve Bank of India i.e. the Central Bank of India intervenes in the foreign exchange market so as to avoid any appreciation or depreciation of Indian Rupee in the foreign exchange market.

9.7 SUMMARY

1. The spot exchange rate is day to day rate of exchange which is charged on the delivery of goods on spot or settlement takes place within two days in most markets.

2. The forward transaction is an agreement between two parties, requiring the delivery at some specified future date of a specified amount of foreign currency by the other party, at the price agreed upon in the contract.

3. Exchange risk is the probability that a company will be unable to adjust prices and costs to offset changes in the exchange rate.

4. Economic exposure may be divided into Transaction exposure, Operating exposure, Accounting exposure.

5. A currency swap refers to a spot sale of a currency combined with a forward repurchase of the same currency as part of single transaction.

6. The foreign exchange market is dominated by the swap and spot markets.

7. Currency swaps saves costs, promote liquidity and depth in the markets and provide a hedge to the risk that parity is exposed to. Currency swaps used to help financing the long term requirements of funds for projects of MNCs.

8. Hedging means covering foreign exchange risks arising out of fluctuations in exchange rates.

9. An option is a contract or financial instrument that gives holder the right, but not the obligation, to sell or buy a given quantity of an asset at a specified price at a specified future date.

9.8 QUESTIONS

1. Differentiate between Spot and Forward exchange rates?

2. What are the foreign Risks faced in Forex market?

3. How can the risks be managed effectively?

4. Explain the role of Central Bank in foreign exchange rate management.

5. Explain briefly managed flexible exchange rate system of India.

Revised Syllabus of Courses of B.Com. Programme at Semester V and VI with effect from the Academic Year 2022-2023

Question Paper Pattern

(Theoretical Courses)

Maximum Marks: 100

Questions to be set: 06

Duration: 03 Hrs.

All Questions are Compulsory Carrying 15 Marks each.

Question No	Particular	Marks
Q-1	Objective Questions A) Sub Questions to be asked 12 and to be answered any 10 B) Sub Questions to be asked 12 and to be answered any 10 (*Multiple choice / True or False / Match the columns/Fill in the blanks)	20 Marks
Q-2 Q-2	Full Length Question ***OR*** Full Length Question	15 Marks 15 Marks
Q-3 Q-3	Full Length Question ***OR*** Full Length Question	15 Marks 15 Marks
Q-4 Q-4	Full Length Question ***OR*** Full Length Question	15 Marks 15 Marks
Q-5 Q-5	Full Length Question ***OR*** Full Length Question	15 Marks 15 Marks
Q-6 Q-6	A) Theory questions B) Theory questions ***OR*** Short Notes To be asked 06 To be answered 04	10 Marks 10 Marks 20 Marks

Note:

Theory question of 15 marks may be divided into two sub questions of 7/8 or 10/5 Marks.