University Grants Commission

Subject: Economics Code: 01

Unit-5: International Economics

Contents

SUB UNIT – 1

SL. NO.	TOPICS: TRADE THEORY
1	5.1.1. International Trade theory
2	5.1.2. Mercantilist Trade Theory
3	5.1.3. Classical Trade Theory
4	5.1.4. Absolute Advantage Theory
5	5.1.5. Comparative Advantage Theory
6	5.1.6. Reciprocal Demand Theory
7	5.1.7. Opportunity Cost Theory
8	5.1.8. Modern Trade Theory (Heckscher-Ohlin Theory)
9	5.1.9. The Factor Price Equalization Theorem or Heckscher-Ohlin-Samuelson
10	5.1.10. New Trade Theory
11	5.1.11. Technological Gap Model
11	5.1.12. Product Cycle Model
12	5.1.13. Intra-Industry Trade Theory
14	5.1.14. “New” New Trade Theory
15	5.1.15. Terms of Trade
16	5.1.16. Gains From Trade
17	5.1.17. Economic Growth and Terms of Trade

SUB UNIT- 2:

SL. NO.	TOPICS: TRADE POLICY
1	5.2.1. Meaning of Trade Theory
2	5.2.2. The Case For Free Trade
3	5.2.3. Arguments Against Free Trade
4	5.2.4. Protection in International Trade
5	5.2.5 Arguments for Protection
6	5.2.6. Arguments Against Protection
7	5.2.7. Method of Protection
8	5.2.8. Tariff
9	5.2.9. Optimum Tariff
10	5.2.10. Effective Rate of Tariff
11	5.2.11. Stolper- Samuelson Theorem
12	5.2.12. Nontariff Barrier: Import Quotas

13	5.2.13. Other Nontariff Barrier
14	5.2.14. Economic Integration
15	5.2.15. Trade creation and Trade Diversion of Customs Union

SUB UNIT-3

SL. NO.	TOPICS: BALANCE OF PAYMENT
1	5.3.1. Definition
2	5.3.2. Balance of Payment Accounting Principle
3	5.3.3. Component of Balance of Payment
4	5.3.4. Balance of payment Model
5	5.3.6. Equilibrium and Disequilibrium in Balance of Payment
6	5.3.6. Measure to Correct the Disequilibrium in Balance of Payment
7	5.3.7. The Adjustment Mechanism In Balance of Payment

SUB UNIT-4

SL. NO.	TOPICS: FOREIGN EXCHANGE MARKETS AND EXCHANGE RATES
1	5.4.1. Foreign Exchange Markets
2	5.4.2. Exchange Rate
3	5.4.3. Some Concept relating to Foreign Exchange rate
4	5.4.4. Theories of Foreign Exchange
5	5.4.5. Exchange Rate Policy
6	5.4.6. Mundel – Flaming Model for The Case of Open Market Macroeconomics

SUB UNIT-5

SL. NO.	TOPICS: INTERNATIONAL MONETARY SYSTEM
1	5.5.1. Meaning
2	5.5.2. International Gold Standard
3	5.5.3. Bretton Woods System
4	5.5.4. International Monetary Fund
5	5.5.5. World Bank
6	5.5.6. IBRD
7	5.5.7. IDA
8	5.5.8. IFC
9	5.5.9. MIGA
10	5.5.10. ICSID
11	5.5.11. Asian Development Bank (ADB)
12	5.5.12. GATT
13	5.5.13. WTO
14	5.5.14. Eurocurrency

SUB UNIT-1
TRADE THEORY

5.1.1. International Trade Theory

International Trade theory has started with three basic questions, **1. What is the basic for trade? 2. What are the gains from trade?** Presumably, a nation will voluntarily engage in trade only if it benefits from trade. But how are gains from trade generated? How large are the gains and how are they divided among the trading nations? 3**. What is the pattern of trade?** That is, what commodities are traded and which commodities are exported and imported by each nation?

Theories of International trade enable us to find out the answer to the above mention questions. Trade Theory started by the Mercantilism.

5.1.2. Mercantilist Trade Theory:

Englishman Thomas Munn is his book *England Treasure by Foreign Trade* briefly discussed about the elementary trade theory. Specifically, during the seventeenth and eighteenth centuries a group of men (merchants, bankers, government officials, and even philosophers) wrote essays and pamphlets on international trade that advocated an economic philosophy known as mercantilism. Three basic characteristics have mentioned in this theory. (i) More export then imports; the mercantilists maintained that the way for a nation to become rich and powerful was to export more than it imported. (ii) Bullionism; export surplus would then be settled by an inflow of bullion, or precious metals, primarily gold and silver. The more gold and silver a nation had, the richer and more powerful it was. Thus, the government had to do all in its power to stimulate the nation's exports and discourage and restrict imports. (iii) Zero-sum game; a country can gain by the trade if partner country will loss in that trade.

5.1.3. Classical Trade Theory:

The Classical theory of international Trade was formulated by Adam Smith (1723-1790) in terms of his "Absolute Advantage Model". David Ricardo (1722-1823) expanded it further into what is called Comparative Advantage model. The models of Smith and Ricardo together constitute what is sometimes referred to as "Supply version of Classical Theory of Trade. They treated supply or production costs the determining factor of trade and gains from trade. The modern version of Classical Theory of Trade however treats supply and demand with equal weight, John Stuart Mill being the first to indicate that demand considerations must be incorporated into the Comparative Advantage model.

5.1.4. Absolute advantage theory:

Adam Smith extolled the virtues of free trade. These are the result of the advantages of division of labour and specialization both at the national and international levels.

Assumption:

I. Labour is the only factor of production.
II. Full employment in the economy.
III. Labour is perfectly immobile between the countries.
IV. Law of constant returns operate in production process.

V. No technical change

Theory:

According to Smith, the division of labour at the international level requires the existence of absolute differences in costs. Every country should specialize in the production of that commodity which it can produce more cheaply than others and exchange it for the commodities which cost less in other countries.

Example:

	Commodity X	Commodity Y
Country A	10	5
Country B	5	10

In above table have shown that country A can produce 10X or 5Y with one unit of labour and country B can produce 5X or 10Y with one unit of labour.

In this case country A has an absolute advantage in the production of X and country B has an absolute advantage in the production of Y.

And, therefore Adam Smith maintained that country A should specialize in the production of commodity X and country B in the production of commodity Y. Both the countries would gain by this specialization.

5.1.5. Comparative Advantage Theory:

The principle of comparative cost is based on the difference in production costs of similar commodities in different countries. Production costs differ in countries because of geographical division of labour and specialization in production, due to differences in climate, natural resources, geographical situation and efficiency of labour. A country can produce one commodity at, lower cost than the other. In this way, each country specializes in the production of that commodity in which its comparative cost of production is the least. Therefore, when a country enters into trade with sonic other country, it will export those commodities in which its comparative cost of production is the least and will import those commodities in which its comparative production costs are high. This is the basis of international trade, according to Ricardo.

Assumption:

I. Model started with 2 countries, 2 commodities and 1 factor of production that is labour (2 *2 * 1)
II. The cost of production equals total labour.
III. All the units of labour are homogeneous and it used in the fixed proportion.
IV. Law of constant returns operate in production process.
V. Perfect competition in market system.
VI. No transportation cost.
VII. No barriers to trade. Three is free trade between the two countries, i.e., there are no restrictions in the movement of commodities.
VIII. No technical change.

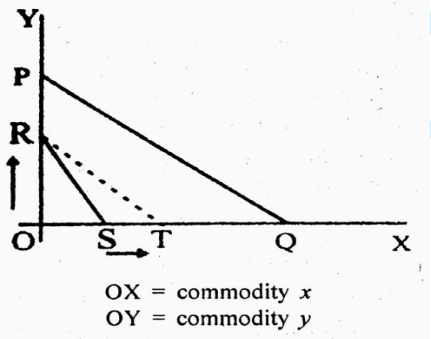
Theory: Comparative advantage occurs due to Comparative cost difference in production of different commodity. Comparative differences in cost occur when one country has an absolute advantage in the production of both commodities, but a comparative advantage in the production of one commodity than in the other.

Example:
Suppose country A can produce 10x or 1Oy and country B can produce 6x or 8y.

	Commodity X	Commodity Y
Country A	10	10
Country B	6	8

In this case country A has an absolute advantage on the production of both x and y, but a comparative advantage in the production of x. Country B is at an absolute disadvantage in the production of both commodities but it has comparatively less disadvantage in the production of y.

Thus, country A has a comparative advantage in the production of commodity x, and has least comparative disadvantage in the production of y. Thus trade is beneficial for both countries. The comparative advantage position of both countries is illustrated in the following figure.



In the figure, PQ is the production possibility curve of country A, and RS that of country B. Country A enjoys an absolute advantage in the production of both x and y over country B. It produces OQ units of x or OP units of y as against OS units of x or OR units y produced by country B. But the slope RT reveals that A has a comparative advantage in the production of commodity x only because if it gives up the resources required to produce OR of commodity, it can produce OT > OS of commodity x. On the other hand, if it gives up resources required to produce OS units of x, it would be able to produce commodity x by an amount less than OR. Thus country A has a comparative advantage in the production of commodity x and country B has a less comparative disadvantage in the production of commodity y.

Labour theory of Value: It is given by David Ricardo and further modified by Karl Marx. Ricardo used this theory extensively to explain the comparative advantage theory.
Under the labour theory of value, the value or price of a commodity depends exclusively on the amount of labour going into the production of the commodity. This implies (1) that either labor is the only factor of production or labour is used in the *same* fixed proportion in the production of all commodities and (2) that labour is homogeneous (i.e., of only one type)

5.1.6. Reciprocal demand theory:

Ricardo formulated his theory of international trade in terms of comparative cost advantage. But Ricardo did not pay attention to the ratio or rate at which one commodity would exchange for the other commodity. The term 'reciprocal demand' was introduced by J. S. Mill to explain the determination of the equilibrium terms of trade. It is used to indicate a country's demand for one commodity in terms of the quantities of the other commodities it is prepared to give up in exchange.

Assumption:

I. Model started with 2 countries, 2 commodities and 1 factor of production that is labour (2 *2 * 1)
II. Law of constant returns operate in production process.
III. Perfect competition in market system.
IV. No transportation cost.
V. Full employment
VI. There is free trade.

Theory:

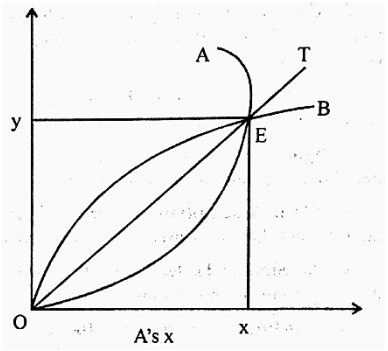
(i)The possible range of barter terms of trade is given by the respective domestic terms of trade as set by comparative efficiency in each country.

(ii) Within this range, the actual terms of trade will depend upon reciprocal demand, i.e., the strength and elasticity of each country demand for the other country's product.

(iii) Only those barter terms of trade will be stable at which the exports offered by each country just suffice to pay for the imports it desires.

Mill's theory of reciprocal demand is explained diagrammatically in terms of Marshall's offer curves.

In the below figure, country A's production of X is taken on the horizontal axis and country B producing only Y is taken on vertical axis. The curve OA is country A's offer curve. It shows how many units of X country A will give up for given quantity of Y. Similarly OB is the offer curve of country B which shows how many units of Y country B is prepared to give up in exchange for a given quantity of cloth. The point E where the two offer curves OA and OB intersect is the y equilibrium point at which OX of commodity X is traded by country A for OY of commodity Y of country B. The rate at which X is exchanged for Y is equivalent to the slope of the line OT.



Offer Curve: Offer curves were devised and introduced into international economics by Alfred Marshall and Ysidro Edgeworth, two British economists, at the turn of the twentieth century. The offer curve of a nation shows how much of its import commodity the nation demands for it to be willing to supply various amounts of its export commodity

5.1.7. Opportunity Cost Theory:

Classical theory of comparative cost advantage is based on the labour theory of value, where all factors of production can be converted into labour equivalent and prices of goods and services are determined by the amount of labour needed to produce these goods and services. However, labour theory of value is an unrealistic theory. Modern economists have discarded the labour theory of value. Haberler has presented an explanation of the Comparative cost theory in terms of opportunity cost.

The opportunity cost theory says that if a country can produce either commodity X or Y, the opportunity cost of commodity X is the amount of the other commodity Y that must be given up in order to get one additional unit of commodity X. Thus the exchange ratio between the two commodities is expressed in terms of their opportunity costs.

Assumption:

I. There is perfect competition in both the factor and commodity markets.
II. There is fixed supply of factors.
III. There is full employment.
IV. There is free trade between the countries. The price of each commodity equals its marginal money costs.
V. The price of each factor equals its marginal value productivity in each employment.

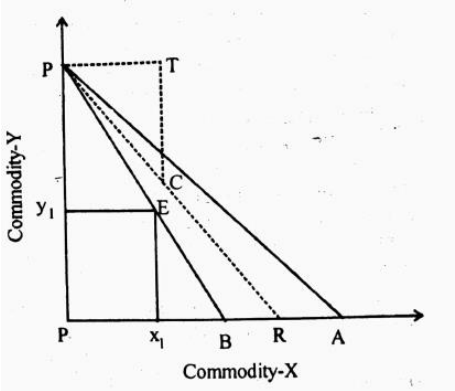
It is the shape of the production possibility curve under different cost conditions that determines the bases and the gains from international trade under the theory of opportunity cost.

(A) Trade under Constant Opportunity Costs: Under constant opportunity costs, the production possibility curve is a straight line.

In the figure, PA is the production possibility curve of count!) A, and P13 of country 13. As the relative prices differ in the two countries, trade is possible between the two.

Country A has a comparative advantage in the production of X and B has a comparative advantage (least disadvantage) in the production of V. under the circumstances, county A will specialize in the production of commodity X and export it to and count!), B will specialize in 1 and export it to A.

PR is the new international price line. Before trade, B was consuming and producing both the commodities at point E. After trade it specializes exclusively in the production of Y at point I and its consumption level shifts up from point E to C on the international price line PR. It will now export 'TC of Y to country international price line PR. It will now export 'IC of Y to country.

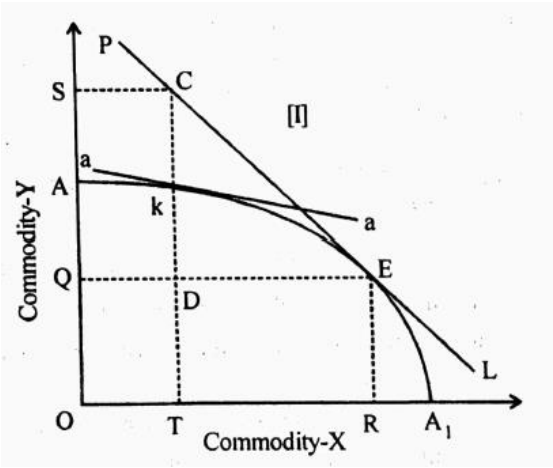


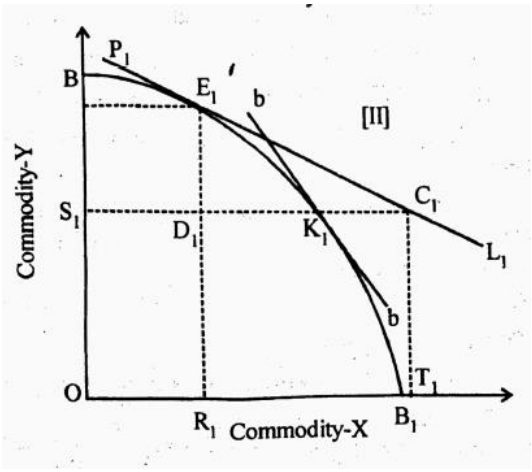
(B) Trade Under Increasing Opportunity Costs. The production possibility) curve under increasing opportunity costs is concave to the origin. In the figure (panel [I]), AA_I is the production possibility of country A which is concave to the origin. The slope of this curve shows that A will specialize in the production of X.

Panel [II] of the figure shows BB_1 is the production possibility curve of country B. The slope of this curve reveals that it will specialize in the production of commodity Y.

In the absence of foreign trade, country A produces and consumes some quantities of both X and Y at point K where the line aa is tangent to AA_1 curve. The line aa indicates the domestic relative commodity prices of X and Y. Similarly country B produces and consumes some quantities of the two commodities at point K1 where its price line bb is tangent to the production possibility curve BB_1. International trade is possible only if the international price ratio of the two commodities differs from that prevailing in the domestic market of each country. The international price ratio is given by the PL line in country A and P1L1 in country B. The new equilibrium point as determined by the price line PLA is E. It will thus produce OR of X and OQ of Y. The consumption point for country A will be at C on the price line PL. It wills then exports TR of X and import QS of Y. The new equilibrium point for country B is point E_1. The consumption point of country B will at C_1 on the price line P_1L_1. It will import DA of X and export DIE, of Y on the trade triangle F_1 D_1 C_1.

Under increasing opportunity costs specialization is always incomplete clue to decreasing returns. Hence the gains from trade arc less than that under complete specialization. Further. The law of comparative costs is valid only under increasing opportunity costs. In a two good world if one country is more efficient in producing both goods than another country, it profits by concentrating on the product in which it has a greater comparative advantage.

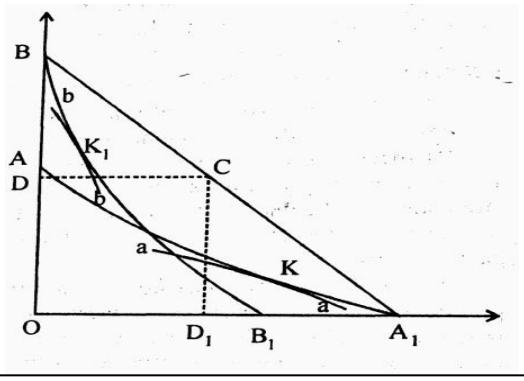




(C) Trade under Decreasing Opportunity Cost: When two countries experience decreasing opportunity costs, their production possibility curves are convex to the origin. Under decreasing opportunity costs, each country completely specializes in the production of only one commodity after trade because there are increasing returns based on international economies of production.

In the figure, AA_I is the production possibility curve of country A_l and BB_I is that of country B. The pre-trade consumption and production point of country A is K and that of country B is K. The slope of the domestic price line as of country a shows that its comparative advantage is greater in the production of commodity X. Similarly. The slope of country B's domestic price ratio bb shows its greater comparative advantage in the production of commodity Y.

If trade starts between the two countries, the international price line (ratio) will be BA_1. The country A will completely specialize in the production of X at point A_l, and country B will completely specialize in the production of Y at B. Now each will move along the international price line BA_1, country A from point A_1 upward and country B from point B downward, and reach point C in consumption. A will export D_IA_1 of X to country B and import D_1C of Y from it on the trade triangle CD_1A_1.



Production Possibility Frontier (PPF): PPF is a curve that shows the alternative combination of the two commodities that a nation can produce by fully utilizes all of its recourse with the best technology available to it. Slope of the PPF is Opportunity cost.

5.1.8. Modern Trade Theory: Heckscher-Ohlin Theory or H-O theory

The classical comparative cost theory did not satisfactorily explain why comparative costs of producing various commodities differ as between different countries. The new theory propounded by Heckscher and Ohlin went deeper into the underlying forces which cause differences in comparative costs.

Assumption:

The Heckscher–Ohlin theory is based on the following assumptions:

I. There are two nations (Nation 1 and Nation 2), two commodities (commodity X and commodity Y), and two factors of production (labour and capital).
II. Both nations use the same technology in production.
III. Commodity X is labour intensive, and commodity Y is capital intensive in both nations.
IV. Both commodities are produced under constant returns to scale in both nations.
V. There is incomplete specialization in production in both nations.
VI. Tastes are equal in both nations.
VII. There is perfect competition in both commodities and factor markets in both nations.
VIII. There is perfect factor mobility within each nation but no international factor mobility.
IX. There are no transportation costs, tariffs, or other obstructions to the free flow of international trade.
X. All resources are fully employed in both nations.
XI. International trade between the two nations is balanced.

Before started the H-O theory we need to have a clear knowledge of some basic concepts—

- Factor Intensity: In a world of two commodities (X and Y) and two factors (labour and capital), we say that commodity Y is capital intensive if the capital–labour ratio (K/L) used in the production of Y is greater than K/L used in the production of X.

  For example, if two units of capital (2*K*) and two units of labour (2*L*) are required to produce one unit of commodity Y, the capital–labour ratio is one. That is, 2/2 in the production of Y. If at the same time 1*K* and 4*L* are required to produce one unit of X,

K/L = 1/4 for commodity X. Since K/L = 1 for Y and K/L = 1/4 for X, we say that Y is K intensive and X is L intensive.

- Factor Abundance: It can be defined by two ways (i) Physical Term (ii) Relative Factor Price. According to the definition in terms of physical units, Nation 2 is capital abundant if the ratio of the total amount of capital to the total amount of labour (TK/TL) available in Nation 2 is greater than that in Nation 1 (i.e., if TK/TL for Nation 2 exceeds TK/TL for Nation 1). According to the definition in terms of factor prices, Nation 2 is capital abundant if the ratio of the rental price of capital to the price of labour time (P_K/P_L) is *lower* in Nation 2 than in Nation 1 (i.e., if P_K/P_L in Nation 2 is smaller than P_K/P_L in Nation 1).

Theory:

We can state the Heckscher– Ohlin theorem as follows: A nation will export the commodity whose production requires the intensive use of the nation's relatively abundant and cheap factor and import the commodity whose production requires the intensive use of the nation's relatively scarce and expensive factor. In short, the relatively labour-rich nation exports the relatively labour-intensive commodity and imports the relatively capital-intensive commodity. Now, Nation 1 exports commodity X because commodity X is the L-intensive commodity and L is the relatively abundant and cheap factor in Nation 1. Conversely, Nation 2 exports commodity Y because commodity Y is the K-intensive commodity and K is the relatively abundant and cheap factor in Nation 2.

Of all the possible reasons for differences in relative commodity prices and comparative advantage among nations, the H–O theorem isolates the difference in relative factor abundance, or factor endowments, among nations as the basic cause or determinant of comparative advantage and international trade. For this reason, the H–O model is often referred to as the factor-proportions or factor-endowment theory. That is, each nation specializes in the production and export of the commodity intensive in its relatively abundant and cheap factor and imports the commodity intensive in its relatively scarce and expensive factor.

H-O Theory has been criticised on the following grounds—

I. The assumption of two-by-two-by-two model is not realistic.
II. Like the classical theory the H-O model is static in nature.
III. Factors are not homogeneous.
IV. Production techniques cannot be homogeneous.

Empirical Evidence on H-O theory (Leontief Paradox):

The first empirical test of the Heckscher–Ohlin model was conducted by Wassily Leontief in 1951 using U.S. data for the year 1947. Since the United States was the most K-abundant nation in the world, Leontief expected to find that it exported K-intensive commodities and imported L-intensive commodities.

The results of Leontief's test were startling. U.S. import substitutes were about 30 percent more K intensive than U.S. exports. That is, the United States seemed to export L-intensive commodities and import K-intensive commodities. This was the opposite of what the H–O model predicted, and it became known as the Leontief paradox.

5.1.9. The Factor Price Equalization Theorem or Heckscher-Ohlin-Samuelson (H-O-S) Theorem:

H-O-S theorem states that International trade will bring about equalization in the relative and absolute returns to homogeneous factors across nations. As such, international trade is a substitute for the international mobility of factors.

What this means is that international trade will cause the wages of homogeneous labour (i.e., labour with the same level of training, skills, and productivity) to be the same in all trading nations (if all of the assumptions in H-O theory hold). Similarly, international trade will cause the return to homogeneous capital (i.e., capital of the same productivity and risk) to be the same in all trading nations. That is, international trade will make w the same in Nation 1 and Nation 2; similarly, it will cause r to be the same in both nations. Both relative and absolute factor prices will be equalized.

- **The Rybczynski Theorem**: This theorem postulates that at constant commodity prices, an increase in the endowment of one factor will increase by a greater proportion the output of the commodity intensive in that factor and will reduce the output of the other commodity. For example, if only L grows in Nation 1, then the output of commodity X (the L-intensive commodity) expands more than proportionately, while the output of commodity Y (the K-intensive commodity) declines at constant P_X and P_Y.

5.1.10. New trade theory:

H-O based on some unrealistic assumption which is hard to satisfy. That's why, in 1970's some economists, who have tried to explain the trade theory by relaxations of those assumptions. New trade theory (NTT) suggests that a critical factor in determining international patterns of trade are the very substantial economies of scale and network affects that can occur in key industries.

These economies of scale and network effects can be so significant that they outweigh the more traditional theory of comparative advantage. In some industries, two countries may have no discernible differences in opportunity cost at a particular point in time. But, if one country specializes in a particular industry then it may gain economies of scale and other network benefits from its specialization.

Another element of new trade theory is that firms who have the advantage of being an early entrant can become a dominant firm in the market. This is because the first firms gain substantial economies of scale meaning that new firms can't compete against the incumbent firms. This means that in these global industries with very large economies of scale, there is likely to be limited competition, with the market dominated by early firms who entered, leading to a form of monopolistic competition.

Monopolistic competition is an important element of New Trade Theory; it suggests that firms are often competing on branding, quality and not just simple price. It explains why countries can both export and import designer clothes.

This means that the most lucrative industries are often dominated in capital-intensive countries, who were the first to develop these industries. Therefore, being the first firm to reach industrial maturity gives a very strong competitive advantage. (Some may say unfair advantage)

New trade theory also becomes a factor in explaining the growth of globalisation.

It means that poorer, developing economies may struggle to ever develop certain industries because they lag too far behind the economies of scale enjoyed in the developed world. This is not due to any intrinsic comparative advantage, but more the economies of scale the developed firms already have.

Paul Krugman was a leading academic in developing New Trade Theory. He was awarded a Nobel Prize (2008) in economics for his contributions in modelling these ideas. "for his analysis of trade patterns and location of economic activity".

- **Some Model on New Trade Theory:**

5.1.11. Technology Gap Model:

According to the technological gap model sketched by Posner in 1961, a great deal of the trade among industrialized countries is based on the introduction of new products and new production processes. These give the innovating firm and nation a temporary monopoly in the world market. Such a temporary monopoly is often based on patents and copyrights, which are granted to stimulate the flow of inventions.

5.1.12. Product Cycle Model:

A generalization and extension of the technological gap model is the product cycle model, which was fully developed by Vernon in 1966. According to this model, when a new product is introduced, it usually requires highly skilled labour to produce. As the product matures and acquires mass acceptance, it becomes standardized; it can then be produced by mass production techniques and less skilled labour. Therefore, comparative advantage in the product shifts from the advanced nation that originally introduced it to less advanced nations, where labour is relatively cheaper. This may be accompanied by foreign direct investments from the innovating nation to nations with cheaper labour.

5.1.13. Intra-Industry trade:

Intra – industry trade refers to trade between identical countries which are exporting & importing similar but differentiated products. The intra- industry trade models developed after 1970s take into account firm level internal economies of scale and 39 product differentiation in explaining trade between identical economies. In the late 1970s, several researchers like - Krugman, Dixit & Norman, Lancaster etc. independently formalized the idea that economies of scale and imperfect competition can give rise to trade even in the absence of comparative advantage. It was the Grubel & Lloyd's (1975)8 study which formed the basis for the development of intra-industry trade models. They found that international trade was maximum between identical (capital abundant) developed countries, and these countries, exported and imported similar but differentiated products.

Intra-industry trade measured by Intra-Industry Index (T);

$$T=1-\frac{|X+M|}{|X-M}$$

Grubal and Lloyd calculated the T index.

5.1.14. "New" New trade theory:

"New" New trade theory says that only highly productive firms are able to production therefore this firm can export in other country. The underlying idea is that these firms make sufficient profits to cover the large fixed costs required for export operations. Melitz is the (2003) constructed a model to explain this phenomenon by the help of empirical evidence.

5.1.15. Terms of trade:

The terms of trade of a nation are defined by as the ratio of the price of its export commodity to the price of its import commodity. Its measure the purchasing power of country export of a country terms of imports.

Types of terms of trade: Different types of terms of trade discussed by Jacob Viner and G.M. Meier.

Notation:

Px = Price of Export
Pm = Price of Import
Qx = Volume of export
Qm = Volume of import
Zx = Productivity index of exports industries
Zm= Productivity index of imports industries
Rx= Index of the amount of disutility per unit of productive resources used in producing export commodities
U = Utility of import

i. **Commodity or Net batter terms of trade:** The most widely used concept of the terms of trade is what has been caned the net barker terms of trade which refers to the relation between prices of exports and prices of imports. It was given by Taussing.

$$Tc = \frac{Px}{Pm}$$

ii. **Gross Barter Terms of Trade**: The Gross barter terms of trade is the ration between the quantity of country's import and exports. It also given by Tassuing.

$$Tg = \frac{Qm}{Qx}$$

iii. **Income Terms of Trade**: Dorrance has improved upon the concepts of the net barter terms of trade by formulating the concept of the income terms of trade. The income terms of trade is the net barter terms of trade of a country multiplied by its export volume index. It can be expressed as.

$$Ty = Tc * Qx = \frac{Px.\ Qx}{Pm}$$

iv. **Single Factorial Terms of Trade:** Prof. Viner has developed the concept of Single Factorial Terms of Trade which allows changes in the domestic exports sector. It is calculated by multiplying the commodity terms of trade index by an index of productivity changes in domestic export industries. It can be expressed by

$$Ts = \frac{Px}{Pm} * Zx$$

v. **Double Factorial Terms of Trade**: The double factorial terms of trade take into account productivity change both in the domestic export sector and the foreign export sector producing the country's imports. It also developed by Prof J. Viner The index measuring the double factorial terms of trade can be expressed as

$$Td = \frac{Px}{Pm} * \frac{Zx}{Zm}$$

vi. **Real Cost Terms of Trade:** The concept of real cost terms of trade, introduced by J. Viner, measure the gain from international trade in utility terms. This index is calculated by multiplying the single factorial terms of trade with the reciprocal of an index of the amount of disutility per unit of productive resources used in producing export commodities. It can be expressed as:

$$Tr = Ts * Rx = \frac{Px}{Pm} * Zx * Rx$$

vii. **Utility Terms of trade**: The utility terms of trade are obtained by multiplying the real cost terms of trade index with the index of relative desirable or utility of imports and of domestic commodities forgone that could have been produced for home consumption with these factors of production which are now used in the production of export goods (UM). It was given by J. Viner

$$Tu = Tr * U = \frac{Px}{Pm} * Zx * Rx * U$$

Factor Affecting the Terms of Trade:

i. Economic growth
ii. Changes of factor endowment
iii. Changes in technology
iv. Change in tests
v. Tariff
vi. Devolution

5.1.16. Gains From trade

Meaning and Measurement of Gains from Trade:

Just as two traders in the same country enter into exchange for the consideration of making some gain, in the same way two countries get engaged into transactions for deriving some gain. The economists have viewed the gains from trade from different angles. The classical theorists believed that gains from trade resulted from increased production and specialization.

Some approaches to the concept of gains from trade and their measurement:

(i) Adam Smith's Approach:

In the opinion of Adam Smith, the gains from international trade are in the form of the increased value of product and improvement in the productive capacity of each trading country. The international trade leads to export of the commodity which is less in demand in the home market, and import of the commodity which is strong in demand. It enables each trading country to derive the maximum welfare and obtain maximum possible export earnings.

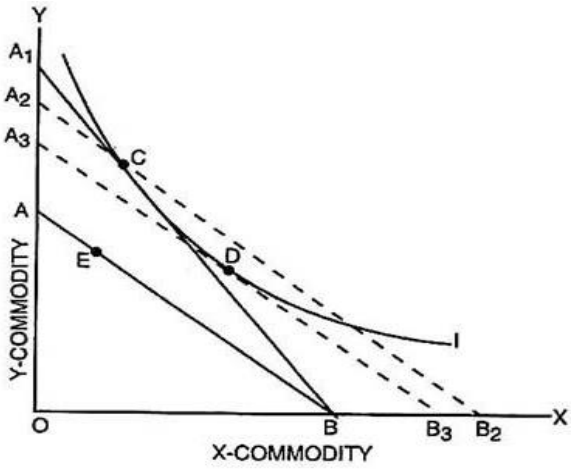
When each country specializes in the production of the commodity in which it has cost advantage, there is optimum allocation of productive resources. Coupled with increased division of labour, specialization reduces the cost structure and enlarges the size of market for each trading country. As a consequence, the world production and welfare gets maximized through international trade.

(ii) Ricardo-Malthus Approach:

Ricardo viewed the gain from trade as an objective entity. According to him, the specialization in production and trade on the basis of the principle of comparative costs results in saving of resources or costs. Through the cheaper availability of commodities required by each country from abroad, every country can increase the 'sum of enjoyments' and also increase the 'mass of commodities'.

In the words of David Ricardo, "The advantage to both places is not that they have any increase in value but with the same amount of value they are both able to consume and enjoy an increased quantity of commodities." Malthus had expressed in this regard views similar to those of Adam Smith. The gain from trade, according to him, consists of "the increased value, which results from exchanging what is wanted less for what is wanted more." The international exchange on this basis increases "exchangeable value of our possession, our means of enjoyment and our wealth."

The Ricardo-Malthus approach to gains from trade was illustrated in below mention figure.



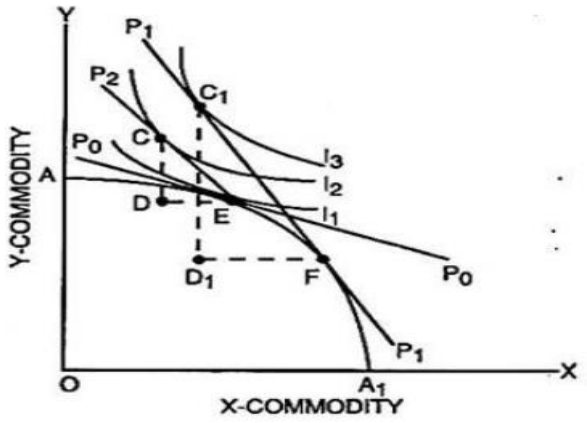
In this Fig. the production possibility curve under constant cost conditions is AB before trade. The production, let us suppose, takes place at E. If this country enters into trade, the international exchange ratio line shifts to A_1B and production of two commodities X and Y now takes place at C. The production at point C will be possible if the labour input increases to such a large extent that the production possibility curve shifts to A_2B_2. The gain from trade will be measured by BB_2/OB.

Malthus criticized this measure of gain from trade as exaggerated. According to him, if the production possibility curve shifts to A_2B_2, the point C cannot be the point of equilibrium. The relative prices along A_2B_2 are more favourable to the export good X than along the line A_1B. Some point to the right of C rather than C itself would be preferable to the community. Hence the gain from trade along the line A_1B cannot be measured by an increase in the input of labour in the ratio BB_2/OB. It tends only to overstate the gain from trade. Ronald Findlay attempted a modification over the Ricardian measure of gain from trade by introducing in this analysis the community indifference curve. Given the community indifference curve I, the equilibrium does not take place at the Ricardian trade equilibrium position C but at D where the production possibility curve A_3B_3 became tangent to the community indifference curve I.

At point D each individual in the community is better off than at C. The gain from trade in this situation is BB_3/OB rather than BB_2/OB. The measure of gain from trade BB_3/OB vindicates the Malthusian criticism that Ricardian measure of gain from trade was over- estimation.

(v) Modern Approach:

The modern approach stresses that the introduction of international trade brings two types of gains—gain from exchange and gains from specialization. These two gains together constitute the gains from international trade. When trade commences, consumers enjoy a higher level of satisfaction, partly because of improvement in terms of trade and partly on account of greater specialization in the use of economic resources of the country. These two types of gains from trade can be shown through mention Fig.



In this Fig, X-commodity is measured along the horizontal scale and Y-commodity is measured along the vertical scale. AA_1 is the production possibility curve. P_0P_0 is the domestic price ratio line. It is tangent to the production possibility 'curve at E. Thus E is the point of production equilibrium in the absence of trade.

E is also the point of consumption equilibrium because P_0P_0 is tangent to the community indifference curve I_1 at this point. When trade commences, P_1P_1 is the international exchange ratio line, which is tangent to the production possibility curve at F and to the community indifference curve I_3 at C_1.

Thus F is the point of production and C_1 is the point of consumption. After trade takes place, D_1F of X-commodity is exported and C_1D_1 quantity of Y-commodity is imported. The trade causes two types of shifts in the country. First, the production point shifts from E to F. It occurs because of specialization in the production of X-commodity and specialization in factor use. This can be called as the production effect. Second, the point of consumption shifts from E at I_1 to C_1 at the higher community indifference curve I_3. It means an increase in the satisfaction of the commodity. This can be called as the consumption effect. Both together signify the gain from international trade.

If a line P_2E is drawn parallel to P_1P_1 from the original equilibrium situation E, it signifies that there is no change in production but the consumption equilibrium shifts from E to C at a higher community indifference curve I_2. In this situation, CD quantity of Y is imported at lower international price of Y. The quantity of X-commodity exported in exchange of CD quantity of Y is DE. Although production is the same as at point E but the consumption equilibrium shifting from E to C signifies the gain from trade. This is the trade gain from exchange.

After trade, as the specialization in production and optimum factor use takes place, the production equilibrium shifts from E to F along the same production possibility curve and consumption equilibrium shifts to C_1. In this situation, C_1D_1 quantity of Y is imported and D_1F quantity of X is exported. As a result of specialization in production after trade, the shift in consumption equilibrium from C to C_1 reflects the trade gain from specialization.

To sum up, the total gain from trade is comprised of gain from exchange and the gain from specialization. The total gain from trade can be measured by the movement from E to C_1. This movement takes place in two steps—the movement from E to C is the gain from exchange and the movement from C to C_1 is the gain from specialization.

5.1.17. Economic Growth and Terms of Trade:

Economic growth of a country causes an outward shift in the production possibilities Frontier (PPF) allowing the larger aggregate output. The upward shift in the PPF may have occurred due to increase in the availability of factors of production and technological improvement allowing the production of larger aggregate output with the given quantity of recourses. The influence of economic growth in the terms of trade depends upon the pattern of country's economic growth. If growth is natural, the terms of trade will remain unaffected. If growth is ultra-export biased the country will produce more quantity of the exports goods and relatively less quantity of the import goods. This condition will necessarily worsen the terms of trade of the country. On other hand, if growth is ultra-import biased, the production of import commodities will increase so much that the production of the export commodities will decrease in absolute terms and the terms of trade will be favourable for the country.

Immiserising Growth: The process of economic growth may bring about an increase in level of output in the growing economy and the wealth effect may even be positive but the deterioration in the terms of its trade may be so large that it more than offsets the positive wealth effect. In such a situation, there can be a net decline in the welfare of the nation. In other words, it becomes worse off than before. The process of growth and trade, resulting in the country becoming poorer in respect of welfare, has been termed as 'immiserising growth' by Jagdish Bhagwati.

SUB UNIT 2
TRADE POLICY

5.2.1. Meaning of Trade Policy

A trade policy which does not impose any barrier on the exchange of goods and services between different countries is generally known as the free trade policy. According to Adam Smith, the concept of free trade policy refers to a system of commercial policy which draws no distinction between domestic and foreign commodities and thus which neither imposes additional burden on the latter nor grants any special favour to the former. Thus, free trade policy permits international flow of goods and services without any artificial impediments. Prof. Lipsey gives a very simple definition, according to him. "A world of Free Trade would be one with no tariffs and no restrictions of any kind on importing or exporting. In such a world, a country would import all those commodities that it could buy from abroad at a delivered price lower, than the cost of producing them at home".

5.2.2. The Case for Free Trade

The classical economists were in favour of the free trade policy: Of the modern economists, Haberler advances the following arguments in favour of free trade.

I. **Maximisation of Output**: According to the principle of comparative cost advantage every country would specialize in the production of that commodity for which it is best suited or in other terms, in the production of which it has comparatively the greatest advantage or the least disadvantage. Therefore, different countries would practise the principle of division of labour or specialization at international sphere producing and exporting those goods for which they are comparatively best suited and in return importing those goods, for which they are relatively less or least suited. This means due to international specialization consequent on the adoption of the principle of free trade. Resources of the world would be put to the maximum use resulting in maximum world output which would be to the advantage of all the participating trading countries of the world.

II. **Free Trade Ensures Optimum Utilisation of World's Productive Resources**: Under the regime of free trade, each country specializes in the production of those commodities for which it is best suited. Naturally, international division of labour or specialization consequent on the adoption on free trade results in the optimal or most efficient use of productive resources of the world.

III. Free trade ensures optimization of consumption of peoples in the world.

IV. Free trade would result in widening of markets.

V. Free trade would prevent emergence of monopolies.

VI. Free trade is the most efficient tool of economic development of developing countries.

VII. Free trade helps development of citizen's qualities.

5.2.3. Arguments or Case against the Free Trade:

I. The policy of free trade came to the practically abandoned after the Great Depression (1929-33) both on theoretical and practical grounds of which the following are the important ones.

II. Free Trade presupposes the existence of Laissez faire and the working of price mechanism under perfect competition. But these conditions do not exist in the present day world, monopoly, monopsony, cartels, imperfect labour markets and tariffs led to the abandonment of free trade.

III. Under the policy of free trade, some industries possess comparative advantage but other industries are not developed. So this naturally leads to the one sided development of the economy.

IV. As under the regime of free trade there was *laissez faire* policy and the state did not impose any restrictions on international movements of goods among nations, many harmful commodities came to be imported by unscrupulous merchants in a number of countries. This had extremely harmful effects on the health and welfare of the community Trade restrictions on the import of such commodities became necessary. This was one of the reasons why many countries came to give up free trade policy.

V. Countries with better factor endowments are able to produce certain commodities cheaper than others. This lead to cut throat competition on the world markets under free trade. Naturally this policy led to the imposition of trade restrictions.

VI. Free trade may lead to the emergence of international monopolies and local monopolies. According to Haberler, such monopolies developed under free trade which proved harmful to the other countries and the domestic interests. This factor also led to the adoption of the policy of protection.

VII. Prof. Haberler's view that policy of free trade would help rapid economic development of backward countries cannot be accepted. And it is now recognised that underdeveloped countries can develop under a policy of protection and riot of free trade.

5.2.4. Protection in International Trade:

The term protection refers to a policy whereby domestic industries are to be protected from foreign competition. The aim is to impose restrictions on the imports of low-priced products in order to encourage domestic industries producing high priced products. The domestic industries may be protected by imposing import duties which raise the price of foreign goods by more than the price of domestic good, or they may be protected by quotas or other non-tariff restrictions which make imports of cheap foreign goods difficult or impossible or, the domestic industries may be paid subsidies or bounties to enable them to compete with cheap foreign goods.

The earliest explanation of the modern theory of protection can be found in the famous -Report on the Subject of Manufacturers- submitted to the House of Representatives in 1791 by Alexander Hamilton (1750-1804).

5.2.5. Arguments for Protection:

Haberler has divided the arguments for protection into two groups-economic and non-economic. We discuss these one by one.

(A) Economic Arguments: The economic arguments which are usually given in favour of protection are

(1) **Terms of Trade Arguments**: The terms of trade argument is given to correct disequilibrium in the balance of payments of a country. It is argued that the imposition of a tariff on imports improves the rate at which the country's exports are exchanged for imports. This means that a tariff improves its terms of trade because the foreign exporter is forced to pay some part of the import duty. The extent to which a country can improve its terms of trade by imposing import duty will depend upon relative demand and supply elasticities at home and abroad.

(2) **Bargaining Argument**: It is argued that the imposition of tariff is necessary to bargain on trade negotiations with other countries. But the bargaining arguments for protection are not sound on many counts.

(3) **Anti-dumping Argument**: Protection is advocated against the practice of dumping. Dumping means selling a product in a foreign market at a lower price than in the home market. Dumping aims at flooding a foreign market with low-priced commodities. As a result, the import competing firms are ruined. To protect such firms, a high tariff is imposed. This will raise the price of the product in the importing country and remove the threat of dumping.

(4) **Diversification Arguments**: It means that there should be a balanced growth of the economy so that all the sectors of the economy develop side by side. For this purpose, agriculture and manufacturing industries should be protected from foreign competition.

(5) **Infant Industry Argument:** This argument was formulated by Alexender Hamilton In 1790 and was popularised by F. List in 1885. It is argued that if industries in their infancy are not protected from established foreign producers, they cannot develop to enjoy the comparative advantage. So, it is protected by providing all types of facilities. Such as subsidise hem.) Import duties on foreign goods etc. It may expand and enjoy internal economies of scale. The infant industry argument for protection has been severely criticised by economists.

(i) It is difficult to decide which industry needs protection because every industry is in its infancy to begin with.

(ii) Protection is given to an infant industry with the promise that it would be withdrawn after a few years when the industry attains adulthood and is able to face foreign competition, but it is difficult to decide about this due to the lack of any reliable criteria.

(iii) Once protection is granted to an industry vested interest are created which do not want the removal of duties.

(iv) Some of the industrialists who start making monopoly profits tinder protection do not want to removal of duties. Lastly, according to Haberler the alleged possibilities of external economies under infant industry protection are vague muddled and doubtful.

(6) **Socially Important or Key Industry Argument**: Protection should be given to socially important industries such as agriculture or strategically important industries as iron and steel, heavy electrical machine making, heavy chemical, etc.

(7) **Employment Argument**: A usual argument for protection is that it is a cure for unemployment. The imposition of a tariff reduces imports and encourages employment directly in import competing industries.

(8) **Balance of Trade Argument**: The balance of trade argument is based on the notion that a country should impose tariff to have a surplus of exports over imports. Such a surplus brings bullion into the country. But this is not a correct view because if all countries follow the same rule, none would gain.

(9) **Labour Intensive Technique Argument**: High wage domestic goods should be protected from low wage imported goods by imposing tariffs.

(10) **Keeping Money at Home Argument**: This is fallacious argument for protection. According to this argument, when we buy manufactured goods abroad we get the goods and the foreigner gets the money when we buy the manufactured goods at home we get both the goods and the money. This argument is illogical because if every country were to follow this rule, there would be no international trade and the benefits of it would not accrue to any country of the world.

(11) **Expanding Home Market Argument**: Protection would expand the home market for all domestic products.

(12) **Cost Equalisation Argument**: Protection to domestic industries is advocated for equalising costs of production of domestic and foreign products.

(B) **Non-Economic Arguments**: There are two important non-economic arguments for protection.

(1) Defence Arguments: A country should adopt the policy of protecting its industries from the standpoint of national defence. If a country is dependent on other countries for its requirements of agricultural and industrial products. it will be very harmful for its national interest in times of war.

(2) Preservation Argument: Protection is advocated to preserve the special ethos of the nation and certain classes of the population or certain occupations.

- **Arguments for Protection in underdeveloped Countries:** Protection has special appeal for underdeveloped countries because they want to:

(a) Have a larger share of the gains from international trade,

(b) Increase the rate of capital formation,

(c) Promote industrialisation.

(d) Reduce unemployment, and

(e) Maintain equilibrium in the balance of payments.

5.2.6. Arguments against Protection:

(1) Low Economic Utilization of Natural Resources. Every country produces goods in accordance with the principle of comparative cost under free trade. Hence the country comes to enjoy all the advantages and economies of territorial division of Labour.

(2) Encouragement to inefficient Industries. The policy of protection often feeds those industries which are not efficient or economical in the real sense of the term.

(3) Establishment of Monopolistic Organizations. The polio of protection by eliminating foreign competition provides ample opportunities to the endogenous industrialists to set up monopolistic organization to exploit the consumers and the workers.

(4) Loss to Consumers. The consumers suffer losses under the policy of protection because they have to pay higher prices on account of the absence of foreign competition.

(5) Fall in the Efficiency of Industry. The level of efficiency in the protected industries invariably goes down on account of the absence of any competition from abroad.

5.2.7. Methods of Protection:

(1) Commercial Prohibition. Sometimes the government prohibits altogether the import of foreign goods with a view to giving protection to home industries.

(2) Subsidies: The government may not resort to protective tariff duties for fear of retaliation from foreign countries.

(3) Quota System: A quota is a legal restriction on the quantity of a commodity that could be imported from abroad. According to this system the government fixes in advance the maximum quota of a commodity to be imported from abroad. The quota of any imported commodity is divided amongst a number of countries.

(4) Licence System: Under this system foreign goods can be imported only by Licensed Importers whose business is controlled by the government.

(5) Exchange Control: Under this system every importer has to secure foreign exchange from the government to make payments for imported goods.

(6) Devaluation: The imports can be cut down through a policy of currency devaluation. The reason is that currency devaluation automatically results in a fall in imports because imported goods now become more expensive than before

5.2.8. Tariff

Meaning of Tariff

Tariff refers to duties or tax levied by the government on commodities which are imported into a country from abroad. Tariff is thus synonyms with import duties or custom duties.

Tariffs are used for two different purposes: for revenue and for protection. Revenue tariffs are imposed on luxury consumer goods. The lower the import duties, the larger are the revenue from them. Protective tariffs are meant to maintain and encourage those branches of home industry protected by the duties.

Types of Tariff

The following types of tariff duties are levied: (i) ad valorem tariff, (ii) specific tariff. (iii) Compound tariff, and (iv) sliding scale tariff

(i) Ad Valorem Tariff: The most common type of import duty is the ad valorem tariff Ad valorem import duty is imposed as a percentage of the value of the imported commodity. The import duty is a fixed percentage of the C.I.F. (cost, insurance and freight) value of commodity.

(ii) Specific Duty: Specific import duty is imposed by the government on the basis of number of units imported. In other words, specific duty is levied per physical unit of the imported commodity.

(iii) Compound Tariff: Compound import duty is a combination of the ad valorem and the specific duties. In this case, a specific duty is imposed on each unit of the commodity plus a percentage of ad valorem also.

(iv) Sliding Scale Tariff: Sliding tariff is imposed on ad valorem basis or on specific basis. Sliding import duties van' with the prices of commodities imported.

Effects of Tariff

The effects of a tariff may be analysed from the standpoint of the economy as a whole which is known as the general equilibrium analysis, or they may be discussed from the point of view of a particular good or market which is known as the partial equilibrium analysis. According to NET previous year questions, most of the questions are coming from partial equilibrium analysis.

Effects of Tariff under Partial Equilibrium: It is the price effect that is first affected by a tariff and therefore, it may be said that all the above eight effects of a tariff are the result of price effect of a tariff.

Price Effect: If a tariff is imposed on an imported commodity, the price of the commodity will rise, if the demand for the commodity is inelastic in the importing country. On the other hand, if demand for imported commodity is highly elastic, the price of the commodity will not rise and the import duty will be paid by the exporting country. If the position is in between, the price of the commodity in the importing country will not rise by the full amount of the tax but only partly.

Charles Kindleberger has made an attempt to analyse effects of tariffs— (I) protective effect, (ii) consumption effect, (iii) revenue effect, (iv) redistribution effect, (v) terms of trade effect, (vi) competitive effect, (vii) income effect (vii) balance of payments effect.

(i) Protective (production) Effect: The protective effect shows how the domestic industry can be protected from foreign competition by imposing an import duty. The decrease in amount (quantity) of imported good due to price effect of tariff is called production or protective effect. When the domestic producers face the higher price, they are able to cover the rising marginal costs of additional output, and expand production. This replacement of foreign production with domestic production is called the import substitution effect of a tariff.

(ii) Consumption Effect: The consumption effect of the tariff is to reduce the consumption of the commodity on which the tariff is imposed, as also to reduce consumers' net satisfaction.

(iii) Revenue Effect: The revenue effect is the change in government receipts as a result of the tariff. Revenue effect is equal to the amount of the import duty multiplied by the quantity of imports.

(iv) Redistributive Effect: The redistribution effects result from producers receiving a high price for their commodity after the imposition of tariff. The redistribution effect is an addition to producers is surplus derived by subtraction from consumer surplus. A part of loss of consumers' surplus which is neither transferable to the producers nor to the government is called, deadweight loss of the tariff or the cost of the tariff.

(v) Terms of Trade Effect: The terms of trade effect of a tariff is that it improves the terms of trade of the country imposing it. If the supply of a commodity is perfectly inelastic in the exporting country and the demand for it fairly elastic in the importing country, the entire burden of the tariff will be borne by the exporting country. It means that after imposing the tariff, terms of trade would move in favour of the country imposing the tariff.

(vi) Competitive Effect: The competitive effect of a tariff is to protect the domestic industry from foreign competition by imposing a tariff on the commodity imported. According to Prof. Kindleberger, "the competitive effect of a tariff is really an anticompetitive effect; competition is stimulated by tariff removal."

(vii) Income Effect: The income effect refers to the effect of a tariff on the national income of a country imposing the tariff. A tariff reduces the demand for imported goods by reducing imports, and increases the demand for home-produced goods on the assumption that there is no relation by the other country. This stimulates import substitution industries in the country. Expansion of these industries will mean more employment to people and increasing opportunities of earning income. Under conditions of less than full employment, Import duty will raise money and real income and employment.

(viii) Balance of Payment Effect: A tariff reduces the country's international expenditure and brings stability in the balance of payments.

5.2.9. Optimum Tariff:

The optimum tariff is that rate of tariff that maximizes the net benefit resulting from the improvement in the nation's terms of trade against the negative effect resulting from reduction in the volume of trade. That is, starting from the free trade position, as the nation increases its tariff rate, its welfare increases up to a maximum (the optimum tariff) and then declines as the tariff rate is raised past the optimum. Eventually the nation is pushed back toward the autarky point with a prohibitive tariff.

Prof. kindleberge has devised a formula to measure the rate of optimum tariff which is

$$T_f = 1/(e-1)$$

Where, T_f is Optimum tariff and e is the point elasticity of point of offer curve of the country.

5.2.10. Effective Rate of Tariff:

The nominal tariff rate does not take into consideration the height of the duty on the imported intermediate products and rats materials which are used in the domestic import competing industry. The theory of effective rate of protection takes into account duties levied on such raw materials and intermediate products. Under the usual assumptions of international immobility of labour and capital, the effective rate of duty will indicate the degree or protection of value added in the manufacturing process. The effective rate of protection is defined as the percentage in the value added of an industry per unit of output as a result of the tariff relative to the free trade situation but with the sink exchange rate.

The effective rate of protection is measured by

$$E_t = \frac{T - Ai\ Ti}{1 - a}$$

Where,
Et= the rate of effective protection to producers of the final commodity.
T = the nominal tariff rate on consumers of the final commodity.
Ai = the ratio of the cost of the imported input to the price of the final commodity in the absence of tariffs.
Ti = the nominal tariff rate on the imported input.

- **When Tariff imposed by a Small country**, it will not affect prices on the world market. However, the domestic price of the importable commodity will rise by the full amount of the tariff for individual producers and consumers in the small nation.

- **When Tariff imposed by a Large country,** When a large country imposes a tariff, its offer curve shifts or rotates toward the axis measuring its importable commodity by the amount of the import tariff. The reason is that for any amount of the export commodity, importers now want sufficiently more of the import commodity to also cover (i.e., pay for) the tariff. The fact that the large country will effects the world price that is reflected in the trade partner's (or rest of the world's) offer curve. Under these circumstances, imposition of a tariff by a large nation reduces the volume of trade but improves the country's terms of trade. The reduction in the volume of trade, by itself, tends to reduce the country's welfare, while the improvement in its terms of trade tends to increase the nation's welfare. Whether the country's welfare actually rises or falls depends on the net effect of these two opposing forces.

This is to be contrasted to the case of a small country imposing a tariff, where the volume of trade declines but the terms of trade remain unchanged so that the small nation's welfare always declines.

5.2.11. Stolper – Samuelson Theorem:

The Stolper–Samuelson theorem postulates that an increase in the relative price of a commodity (for example, as a result of a tariff) raises the return or earnings of the factor used intensively in the production of the commodity. Thus, the real return to the country's scarce factor of production will rise with the imposition of a tariff. For example, when Nation 2 (the K-abundant nation) imposes an import tariff on commodity X (its L-intensive commodity), PX /PY rises for domestic producers and consumers, and so will the real wage of labour (Nation 2's scarce factor).

- **Metzler Paradox:** This is theoretical contradictory situation of Stolper – Samuelson theorem; it was discovered by American economist Lloyd Metzler. This theory postulates that, when a tariff lowers rather than raises the relative price of the importable commodity to individuals in the country, the income of the country's scarce factor also falls, and the Stolper–Samuelson theorem no longer holds.

5.2.12. Nontariff Barrier: Import Quotas:

As a protectionist device, import quotas are alternative to tariffs Import quota means permitting import of a fired quantity of commodity in volume or value during a specified period of time, generally one year. For this purpose, the government may issue an import license that it may sell either to importers at a competitive price or just give it to importers on the busts of first come first served.

Objectives of Import Quota:

The main objectives of import quota arc as follows:

I. To provide protection and help domestic industries.
II. To improve balance of payments position of the country,
III. To use rationally of scarce foreign exchange reserves.

Types of Import Quota:

I. **Tariff Quota**: Under this system, a pre-determined quantity of a commodity is permitted to be imported either duty free or on payment of import duty that is relatively low. Imports in excess of that quantity arc charged a relatively high rate of duty.

II. **Unilateral Quota**: Under this system, import quota of a particular commodity is fixed by law or decree by the importing country without any negotiation or agreement with the other countries). The autonomously fixed quota may he either global or allocated. Under the global quota, the full amount of the quota may be imported from any one country. While under the allocated quota system, the total quantity of the quota is distributed among different countries.

III. **Bilateral Quota**: Under this system, a country can negotiate with each country separately and fix import quotas. Import quota is fixed by some agreement with one or more other countries. Haberler calls them agreed quota.

IV. **Mixing Quota**. Under this system, the quota — fixing country insists that domestic producer of a certain specified commodity compulsorily use imported raw material in a certain fixed proportion along with domestically produced raw material while producing the commodity. This quota system benefits the quota fixing country in two ways.
    a. It protects domestic producers of raw materials from foreign competition.
    b. It saves the foreign exchange of the country.

Comparison between Tariff and Quota:

Like tariff, Import Quota causes a reduction in imports, a rise in prices and an increase in domestic production of a commodity on which it is imposed. But there are important differences between an import quota and a tariff which are discussed as under:

(i) An import quota brings speedier and also definite quantitative results in respect of the imported commodity compared to the effects of tariff.

(ii) An import quota is more discriminatory than a tariff in restricting the supply of commodities from different countries.

(iii) Imposition of a tariff benefits the government in the form of additional revenue while an import quota brings profits to importers to holding licences. However, the government may profit from the quota if it auctions import licenses to imports.

(iv) An import quota eliminates foreign competition and encourages domestic monopoly more than a tariff. An import quota is worse than a tariff when it creates monopoly.

(v) Import quota is generally fixed by an executive decree of the government, it is, therefore, often arbitrary and is liable to lie altered by another order under pressure. On the other hand, tariff duty is imposed after passing due legislation. Legislative changes cannot be brought about often and certainly not in an arbitrary way as can be done in the case of import quota.

5.2.13. Other Nontariff Barrier and New Protectionism:

During the recent times, these nontariff trade barriers (NTBs), or the new protectionism, have become more important than tariffs as obstructions to the flow of international trade and represent a major threat to the world trading system.

I. **Voluntary Export Restrictions:**
One of the most important of the nontariff trade barriers, or NTBs, is voluntary export restraints (VERs). These refer to the case where an importing country induces another nation to reduce its exports of a commodity "voluntarily," under the threat of higher all-around trade restrictions, when these exports threaten an entire domestic industry.

II. **Technical, Administrative and Other Regulations:** International trade is also hampered by numerous technical, administrative, and other regulations. These include safety regulations for automobile and electrical equipment, health regulations for the hygienic production and packaging of imported food products, and labelling requirements showing origin and contents. Many of these regulations serve legitimate purposes, but some (such as the French ban on scotch advertisements and the British restriction on the showing of foreign films on British television) are only thinly veiled disguises for restricting imports.

III. **International Cartel:**
An international cartel is an organization of suppliers of a commodity located in different nations (or a group of governments) that agrees to restrict output and exports of the commodity with the aim of maximizing or increasing the total profits of the organization. Although domestic cartels are illegal in the United States and restricted in Europe, the power of international cartels cannot easily be countered because they do not fall under the jurisdiction of any one nation.

IV. Dumping:

Trade barriers may also result from dumping. Dumping is the export of a commodity at below cost or at least the sale of a commodity at a lower price abroad than domestically.

Types of Dumping—

i. **Persistent Dumping** implies that the continuous tendency of a domestic monopolist to maximize total profits by selling the commodity at a higher price in the domestic market than internationally.

ii. **Predatory Dumping** is the temporary sale of a commodity at below cost or at a lower price abroad in order to drive foreign producers out of business, after which prices are raised to take advantage of the newly acquired monopoly power abroad.

iii. **Sporadic Dumping** is the occasional sale of a commodity at below cost or at a lower price abroad than domestically in order to unload an unforeseen and temporary surplus of the commodity without having to reduce domestic prices.

V. Export Subsidies:

Export subsidies are direct payments (or the granting of tax relief and subsidized loans) to the nation's exporters or potential exporters and/or low-interest loans to foreign buyers to stimulate the nation's exports. As such, export subsidies can be regarded as a form of dumping. Although export subsidies are illegal by international agreement, many nations provide them in disguised and not-so-disguised forms.

5.2.14. Economic Integration:

The theory of economic integration refers to the commercial policy of discriminatively reducing or eliminating trade barriers only among the nations joining together. The degree of economic integration ranges from preferential trade arrangements to free trade areas, customs unions, common markets, and economic unions.

(A) Preferential trade arrangements provide lower barriers on trade among participating nations than on trade with non-member nations. This is the loosest form of economic integration. The best example of a preferential trade arrangement is the British Commonwealth Preference Scheme.

(B) Free trade area is the form of economic integration wherein all barriers are removed on trade among members, but each nation retains its own barriers to trade with non-members. The best examples are the European Free Trade Association (EFTA), formed in 1960 by the United Kingdom, Austria, Denmark, Norway, Portugal, Sweden, and Switzerland.

(C) Customs union allows no tariffs or other barriers on trade among members (as in a free trade area), and in addition it harmonizes trade policies (such as the setting of common tariff rates) toward the rest of the world. The most famous example is the European Union (EU), or European Common Market, formed in 1957 by West Germany, France, Italy, Belgium, the Netherlands, and Luxembourg.

(D) Common market goes beyond a customs union by also allowing the free movement of labour and capital among member nations. The EU achieved the status of a common market at the beginning of 1993.

(E) Economic union goes still further by harmonizing or even unifying the monetary and fiscal policies of member states. This is the most advanced type of economic integration. An example is Benelux, which is the economic union of Belgium, the Netherlands, and Luxembourg, formed after World War II (and now part of the EU). An example of a complete economic and monetary union is our own United States.

5.2.15. Trade creation and Trade Diversion of Customs Union:

Trade creation occurs when some domestic production in a nation that is a member of the customs union is replaced by lower-cost imports from another member nation. Assuming that all economic resources are fully employed before and after formation of the customs union, this increases the welfare of member nations because it leads to greater specialization in production based on comparative advantage. A trade-creating customs union also increases the welfare of non-members because some of the increase in its real income (due to its greater specialization in production) spills over into increased imports from the rest of the world.

Trade diversion occurs when lower-cost imports from outside the customs union are replaced by higher cost imports from a union member. This results because of the preferential trade treatment given to member nations. Trade diversion, by itself, reduces welfare because it shifts production from more efficient producers outside the customs union to less efficient producers inside the union. Thus, trade diversion worsens the international allocation of resources and shifts production away from comparative advantage. This concept mainly discussed by Jacob Viner.

SUB UNIT 3
BALANCE OF PAYMENTS (BOP)

5.3.1. Definition:

The balance of payments is a summary statement in which, in principle, all the transactions of the residents of a nation with the residents of all other nations are recorded during a particular period of time, usually a calendar year. The main purpose of the balance of payments is to inform the government of the international position of the nation and to help it in its formulation of monetary, fiscal, and trade policies. Governments also regularly consult the balance of payments of important trade partners in making policy decisions. The information contained in a nation's balance of payments is also indispensable to banks, firms, and individuals directly or indirectly involved in international trade and finance.

5.3.2. Balance of Payment Accounting Principle:

I. **Credits and Debits**: Credit transactions are those that involve the receipt of payments from foreigners. Debit transactions are those that involve the making of payments to foreigners. Credit transactions are entered with a positive sign, and debit transactions are entered with a negative sign in the nation's balance of payments.

II. **Capital Inflow and Capital Outflow:** Capital or Financial inflows can take either of two forms: an increase in foreign assets in the nation or a reduction in the nation's assets abroad. On the other hand, capital or financial outflows can take the form of either an increase in the nation's assets abroad or a reduction in foreign assets in the nation because both involve a payment to foreigners.

III. **Double-Entry Bookkeeping:** Double-Entry Bookkeeping means that each international transaction is recorded twice, once as a credit and once as a debit of an equal amount. The reason for this is that in general every transaction has two sides. We sell something and we receive payment for it. We buy something and we have to pay for it.

5.3.3. Component of Balance of Payment:

There are only four components in BOP – (1) Current Account (2) Capital Account (3) Error and Omissions (4) Monetary Movement

Current Account: Current account or income account of the balance of payments includes the flow of all goods and services between one country and rest of the world. It includes (a) commodity imports and exports (b) service imports and exports.

Current account is usually sub-divided into visible and invisible. Visible items refer to those goods we can see and touch when they cross international borders. Invisible items refer to services to all those we cannot see or touch such as insurance.

Capital Account: covers debts and claims payable in money or those constituting money. It contains all changes in claims on or of a country owed by or owed to the rest of the world. Owes a claim to that resident who in turn has an equivalent asset. Changes in bank balances held by foreigners in the domestic banks are included in the capital account. Capital account may be divided into official and private account on the basis of private capital flows and official flows. Private capital flows normally takes place in order to make profit or avoid loss whereas official flows may be induced responses to changes which taking place elsewhere in the balance of payments. There is also an additional third major sub account known as Monetary Gold account which includes all movements of gold between countries out of and into official monetary reserves.

Error and Omission: In the accounting sense balance of payment always must be in balance. Sometimes the balance of payment does not balance. This imbalance is shown in the BOP as errors and omissions. BOP is compiled using the double entry book keeping system consisting assets and liabilities.

Current Account Convertibility: Current account convertibility implies easing restrictions on current international transactions and liberalisation for payment of current transactions at market determined price involving foreign exchange. During mid-1990s ((operationalized on August 19, 1994), the rupee was made fully convertible in India for current account for all trading activities, remittances and indivisibles.

Capital Account Convertibility: Capital account convertibility refers to a liberalization of a country's capital transactions such as loans and investment, both short term and long term as well as speculative capital flows. In a way, capital account convertibility removes all the restrains on international flows on India's capital account.

****Tara-pore Committee's Second Report on Capital Account Convertibility (July 2006):***

With the growing strength of balance of payments in the post-1991 period and with external sector remaining robust and gaining strength every year and the relative macro-economic stability with high growth providing a conducive environment relaxation of capital controls, RBI, in pursuance of the announcement the Prime Minister constituted a committee on March 20, 2006 with Mr. S.S. Tarapore as its chairman for setting out a roadways towards fuller capital account convertibility. The committee submitted its Report to the RBI on July 31, 2006.

5.3. Balance of Payment Model:

STATEMENT II: INDIA'S OVERALL BALANCE OF PAYMENTS : 2012-13			
Item	**April-June 2012 PR**		
	Credit	**Debit**	**Net**
1	**2**	**3**	**4**
A. CURRENT ACCOUNT			
I. MERCHANDISE(BOT)	**4,150**	**6,440**	**-2,290**
II. INVISIBLES (a+b+c)	**2,944**	**1,551**	**1,394**
a) Services	**1,882**	**1,124**	**758**
i) Travel	190	168	22
ii) Transportation	230	198	32
iii) Insurance	29	13	15
iv) G.n.i.e.	9	9	0
v) Miscellaneous	1,425	737	689
Of which :	0	0	0
Software Services	846	34	811
Business Services	412	444	-32
Financial Services	71	78	-7
Communication Services	23	6	17
b) Transfers	946	45	901
i) Official	2	10	-8
ii) Private	944	35	909
c) Income	115	381	-265
i) Investment Income	78	355	-277
ii) Compensation of Employees	38	26	12
Total Current Account (I+II)	**7,094**	**7,991**	**-897**
B. CAPITAL ACCOUNT	**0**	**0**	**0.0**
1. Foreign Investment (a+b)	**2,359**	**2,250**	**109**
a) Foreign Direct Investment (i+ii)	443	230	213
i. In India	396	75	321
Equity	253	56	197
Reinvested Earnings	124	0	124
Other Capital	19	19	0
ii. Abroad	47	155	-108
Equity	47	72	-25
Reinvested Earnings	0	16	-16
Other Capital	0	67	-67
b) Portfolio Investment	1,916	2,020	-104
In India	1,903	1,990	-87

FIIs	1,898	1,990	-92
ADRs/GDRs	5	0	5
Abroad	13	30	-17
2.Loans (a+b+c)	**1,982**	**1,665**	**317**
a) External Assistance	44	46	-2
i) By India	1	4	-3
ii) To India	43	42	1
b) Commercial Borrowings(MT&LT)	304	275	29
i) By India	58	51	7
ii) To India	246	225	21
c) Short Term To India	1,634	1,343	291
i) Suppliers' Credit >180 days & Buyers' credit	1,634	1,308	327
ii) Suppliers' credit up to 180 days	0	36	-36
3. Banking Capital (a+b)	**1,419**	**910**	**509**
a) Commercial Banks	1,419	904	515
i) Assets	348	60	288
ii) Liabilities	1,071	844	227
of which: Non-Resident Deposits	1,046	692	354
b) Others	0	6	-6
4. Rupee Debt Service	**0**	**1**	**-1**
5. Other Capital	**175**	**236**	**-61**
Total Capital Account (1 to 5)	**5,934**	**5,062**	**872**
C. Errors & Omissions	**53**	**0**	**53**
D. Overall Balance (A+B+C)	**13,081**	**13,053**	**28**
[Total Current Account, Capital	**0**	**0**	**0**
Account and Errors and Omissions	**0**	**0**	**0**
E. Monetary Movements (i+ii)	**0**	**28**	**-28**
i) I.M.F.	0	0	0
ii) Foreign Exchange Reserves	0	28	-28
(Increase - / Decrease +)			
PR: Partially Revised. P: Preliminary.			

- **BALANCE OF PAYMENTS AND BALANCE OF TRADE:**

There is a marked distinction between the concept Balance of Trade (BOT) and Balance of Payments (BOP). Balance of trade refers to the merchandise account of exports and imports only. Balance of payments is a broader term and it includes balance of trade. It is more comprehensive than the balance of trade. It includes all international economic transaction and items such as merchandise trade, services, banking, insurance, capital flow, gold buying and selling etc.

• **MEANING OF DEFICIT AND SURPLUS IN BALANCE OF PAYMENTS:**

Autonomous transactions are those which are undertaken for their own-sake for the profits they give. Autonomous transactions have to be distinguished from induced transaction which is movement of reserves. International reserves serve the purpose of filling tip gaps in balance of payments.

A deficit appears in a country's balance of payments, when autonomous transactions requiring payments, exceed autonomous transaction involving receipts. A surplus is said to arise when receipts from exports of goods and services exceed payments for similar items.

Any imbalance in the current account must be offset by appropriate action under the capital account. A deficit in current account must be covered by a surplus in the capital account by borrowing from foreign countries, sale of gold and drawing down foreign exchange from the official reserves. A surplus in the current account must be eliminated by a deficit in the capital account by lending to foreigners, purchasing gold and adding to the official reserves.

5.3.5. Equilibrium and Disequilibrium in Balance of Payment:

1. Balance of Payments Equilibrium

Equilibrium is that state of the balance of payments over the relevant time period which makes it possible to sustain an open economy without severe unemployment on a continuing basis. There are two kinds of equilibrium:

(a) **Stark Equilibrium** is one in which the exports equal imports including exports and imports of services as well as goods and the other items on the balance of payments such as short term capital, long term capital and monetary gold are in the balance zero.

(b) **Dynamic Equilibrium**. The condition of equilibrium for short periods of time is that exports and imports differ by the amount of short term capital movements of gold and there are no large destabilising short term capital movements.

2. Balance of Payments Disequilibrium

There are three main types of disequilibrium.

(a) **Cyclical Disequilibrium**. This is caused by countries having different cyclical patterns of incomes or the same income pattern with different income elasticities or identical income patterns and income elasticities with different price elasticities.

(b) **Secular Disequilibrium**. This 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. Seen disequilibrium is caused by dynamic forces such as population growth, territorial expansion and technological development.

Technological changes are another major cause of disequilibrium in the balance of payments. Filch technological change implies a new comparative advantage which the other country adjusts but the adjustment process itself produces a balance of payment deficit

(c) **Structural Disequilibrium** occurs on account of structural changes in some sectors of the economy at home or abroad which may alter demand or supply relations of exports on imports or both. Structural disequilibrium at the factor level results from factor prices which fail to reflect accurately factor endowments.

5.3.6. Measure to Correct the Disequilibrium in Balance of Payment

There are many measures to correct disequilibrium in the balance of payments.

The important ones are:

(1**) Exchange Depreciation**: Price Effects Under flexible exchange rates the disequilibrium in the balance of payments is automatically solved by the forces to demand and supply of foreign exchange. An exchange rate is the price of a currency which is determined, like any other commodity by demand and supply. Depreciation of currency means that its relative value decreases. Depreciation has the effect of encouraging exports and discouraging imports.

(2) **Devaluation**: Devaluation raises the domestic price of imports and reduces the foreign price of exports of a country devaluating its currency in relation to the currency of another country. There is difference between depreciation and devaluation of the exchange rate. Depreciation is the decision of the market forces whereas devaluation is the decision made by the monetary authority. When the external value of currency is reduced through devaluation, export becomes cheaper and imports dearer. As a result, exports increase and import decline and the balance of payments deficit is eliminated.

(3) **Import Restrictions**: To correct disequilibrium in the balance of payments, governments also adopt direct controls which aim at limiting the volume of imports. The government restricts the import of undesirable or unimportant items by levying heavy import duties, fixation of quotas, etc. At the same time, it may allow imports of essential goods duty free or at lower import duties or fax liberal import quota for them. For instance, the government may allow free entry of capital goods but impose heavy import duties on luxuries. In these ways imports are reduced in order to correct an adverse balance of payments.

(4**) Exchange Control**: Exchange control has a dual purpose. It restricts imports and also controls and regulates the foreign exchange. With reduction in imports and control of foreign exchange, visible and invisible imports are reduced. Consequently adverse balance of payments is corrected.

(5) **Adjustment through Capital Movement**: A country can use capital imports to correct a deficit in its balance of payments.

(6) **Stimulation of Exports**: The deficit in the balance of payments can also be corrected by encouraging exports. Exports can be encouraged by producing quality products, by making exports surplus through increased production and productivity and by better marketing. An increase in exports causes the national income to rise by many times through the operation of the foreign trade multiplier.

5.3.7. The Adjustment Mechanism in Balance of Payment

The adjustment mechanism can be explained with the help of different theories of balance of payments.

Devaluation: The Elasticity Approach: The elasticity approach is associated with Marshall and Lerner. It studies the conditions under which devaluation restores equilibrium in the balance of payments. In its simplest form, the rule states that the price elasticities of demand for imports and exports must sum to greater than unity for an improvement in the balance of payments position. Thus, the condition for improving balance r of payments position by devaluation of domestic currency is given by

$$Ex + Em > I$$

Where Ex is demand elasticity of exports and Em is the demand elasticity of imports. Above condition is known as Marshall-Lerner Condition.

Devaluation: The Absorption Approach. Absorption approach runs through the income effect of devaluation as against the price effect of the elasticity approach. The theory states that if a country has a deficit in the balance of payments, it means that people are absorbing more than they produce. The analysis can be explained in the following form:

$$Y = C + I + X + M$$

Where, Y is national income, C is consumption expenditure, I total domestic investment, X represents exports and M imports.

The sum of C-I is the total absorption designated as A, and the balance of payments (X-M) is designated as B. Thus,

$$Y = A + B \quad \text{or, } B = Y - A$$

This means, balance of payments is the difference between national income and total absorption (consumption plus investment).

Devaluation increases the national income. The additional income so generated will further increase income via the multiplier effect. This will lead to an increase in domestic consumption. Thus the net effect of the increase in national income on the balance of payments is the difference between the total increase in income and the induced increase in absorption, i.e., $\Delta B = \Delta Y — \Delta A$

This difference between Y and A is called the real l hoarding. Thus the effect on the balance of payments of the increase in income due to devaluation is equal to the real hoarding in the economy.

So an improvement in the balance of payments can be brought about by reduction in absorption. Domestic absorption can fall automatically as a result of devaluation due to a real cash balance effect, money illusion and income redistribution.

SUB UNIT 4

FOREIGN EXCHANGE MARKETS AND EXCHANGE RATES

5.4.1. Foreign Exchange Markets:

The foreign exchange market is the market in which individuals, firms, and banks buy and sell foreign currencies or foreign exchange. The principal function of foreign exchange markets is the transfer of funds or purchasing power from one nation and currency to another.

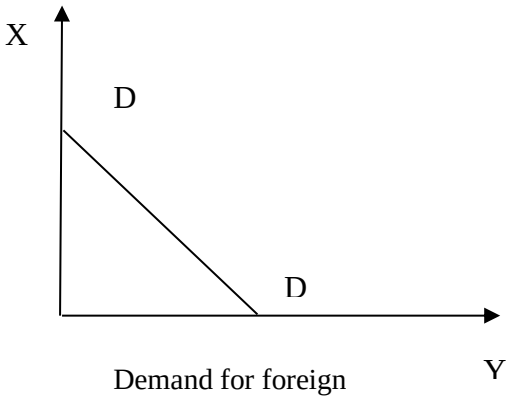
5.4.2. Exchange Rate:

The rate at which the currencies of two nations are exchanged for each other is called the rate of exchange. For example, if 1 U.S. dollar ($) is exchanged for Rs. 48 then foreign exchange rate is I U.S. $ =Rs. 48. In other words, the rate of exchange is nothing but the value or price of a country's currency expressed in terms of a foreign currency.

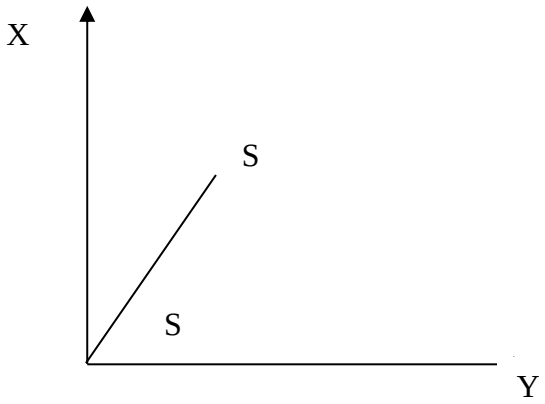
The rate of exchange in the foreign exchange market will be determined by the interaction between the demand for foreign exchange and the supply of foreign exchange. The demand function for foreign exchange shows functional relationship between alternative rate of exchange and the corresponding y amount of foreign exchange demanded. When the rate of exchange is low, the demand for foreign exchange tends to be high because there will be high propensity to import.

The supply function of foreign exchange represents the functional relationship between the rate of exchange and the amount of foreign exchange supplied. When the rate of exchange is high more foreign exchange is supplied as there will be more export due to high foreign demand.

In the figure below, on the vertical axis measure rate of foreign exchange and on the horizontal axis measure amount of foreign exchange.

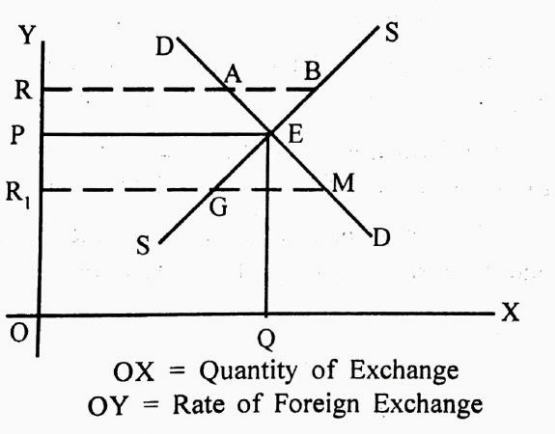


Demand for foreign exchange



Supply of foreign exchange

Equilibrium of Foreign Exchange Rate:
Equilibrium rate of exchange is determined at a point where demand for foreign exchange equals its supply.



It is obvious that if the rate of exchange is above or below the equilibrium point of intersection of demand and supply curves, conditions of excess demand or excess supply would come to exist in the foreign exchange market. The excess of demand for foreign currency will push up its price. Hence, the rate of exchange will rise, demand for it will contract and its supply will expand.

The process will continue till both demand and supply become equal. Conversely, if there is excess of supply of foreign currency against its demand, the rate of exchange will fall.

Equilibrium rate of exchange is the rate of exchange at which the par value of home currency with foreign currency is maintained at a stable level over a long period of time. Which means it is neither undervalued nor overvalued.

5.4.3. Some Concept Relating to Foreign Exchange rate:

Arbitrage: This refers to the purchase of a currency in the monetary center where it is cheaper, for immediate resale in the monetary center where it is more expensive, in order to make a profit. The exchange rate between any two currencies is kept the same in different monetary centers by arbitrage.

Spot and Forward Rates: The most common type of foreign exchange transaction involves the payment and receipt of the foreign exchange within two business days after the day the transaction is agreed upon. The two-day period gives adequate time for the parties to send instructions to debit and credit the appropriate bank accounts at home and abroad. This type of transaction is called a spot transaction, and the exchange rate at which the transaction takes place is called the spot rate.

Besides spot transactions, there are forward transactions. A forward transaction involves an agreement today to buy or sell a specified amount of a foreign currency at a specified future date at a rate agreed upon today, this is called forward rate.

Foreign Exchange Swap: A foreign currency swap or Currency Swap, also known as an FX swap, is an agreement to exchange currency between two foreign parties. The agreement consists of swapping principal and interest payments on a loan made in one currency for principal and interest payments of a loan of equal value in another currency. One party borrows currency from a second party as it simultaneously lends another currency to that party. The Federal Reserve System offered this type of swap to several developing countries in 2008.

Foreign exchange futures: A foreign exchange futures is a forward contract for standardized currency amounts and selected calendar dates traded on an organized market (exchange).

Foreign exchange option: It also known as a forex option, FX option or currency option — is a type of foreign exchange derivative that gives you the option to buy or sell currency at a specific price. Options are intended to give you more flexible opportunities in the future and protect you from unfavourable fluctuations in the exchange rate of a currency.

Foreign exchange risk is the threat of financial loss as a result of changes to foreign exchange rates. The risk can occur when a financial transaction takes place using a currency that's different to the base currency of the company or individual, and value is lost before the transaction is completed.

Hedging: It is refers to the avoidance of a foreign exchange risk, or the covering of an open position.

Speculation: Speculation is the opposite of hedging. Whereas a hedger seeks to cover a foreign exchange risk, a speculator accepts and even seeks out a foreign exchange risk, or an open position, in the hope of making a profit.

5.4.4. Theories of Foreign Exchange:

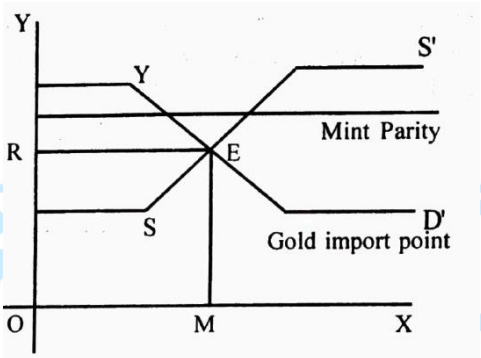
There are three theories of the determination of foreign exchange rate. The first is the Mint Parity theory; the second is the Purchasing Power Parity theory and third is the Balance of Payments theory.

The Mint Par Parity Theory:

This theory is associated with the working of the international gold standard. Under this system the currency in use was made of gold or was convertible into gold at a fixed rate. The value of the currency unit was defined in terms of certain weight of gold. The central bank of the country was already ready to buy and sell gold at the specified price. The rate at which the standard money of the country was convertible into gold was called mint price of gold. If the official British price of gold was £ 6 per ounce and of the US price of gold $ 36 per ounce they were the mint prices of gold in the respective countries. The exchange rate between the dollar and the pound would be fixed at $36 = £6. This rate was called the mint parity or mint par of exchange, because it was based on the mint price of gold. Thus under the gold standard, the normal or basic rate of exchange was equal to the ratio of the mint par values when the gold standard was in fashion. The exchange rate was determined by the respective gold equivalents of the currencies involved or the mint parity and tended to stay close to it. The mint par was a

fixed rate and remained constant so long as the monetary terms of the countries remained unchanged. The current or the market rate of exchange fluctuated from time to time due to changes in balance of payments. The fluctuations of the market rate of exchange were limited by gold movements from one country to another. The upper and the lower limits of such fluctuations were technically known as "specie" on gold export and gold import points. These gold points were determined by the cost of insurance, transportation and handling charges attendant on the physical shipment of gold between countries.

It may be emphasised again at the cost of repetition that the exchange rate was determined between the gold parity by the forces of supply and demand. Any substantial shills in the schedule however would bring about a gold flow which will restore equilibrium almost automatically. The country gaining the gold would find its money supply increasing and prices and incomes rising while the reserve would be the cost in the country receiving the gold. The lower prices and higher interest rates in gold exporting country would make it attractive for gold receiving country to increase its imports and purchase securities from the country experiencing deflation.



OX = Quantity of Foreign Exchange.
OY = Exchange rate

In the figure the exchange rate OR is set up at point E, where the demand and supply curve DD_1 and SS_1 intersect.

The Purchasing Power Parity Theory or PPP Theory:

The purchasing-power parity theory was elaborated and brought back into use by the Swedish economist Gustav Cassel in order to estimate the equilibrium exchange rates at which nations could return to the gold standard after the disruption of international trade and the large changes in relative commodity prices in the various nations caused by World War I. There is an absolute and a relative version of the PPP theory. The theory has two forms—the first dealing with the determination of the rate of exchange between two inconvertible currencies and the second dealing with the causes and the degree of fluctuations in the rate of exchange. In other words the theory has been presented in two versions the absolute version and relative version.

(A)Absolute Version: The equilibrium rate of foreign exchange between two inconvertible currencies tends to be determined at the point at which there is equality between the respective purchasing powers of the two currencies. The actual rate of exchange at any time may move away from the purchasing power parity due to influences of demand and supply of foreign currency.

The rate of Exchange is – $\mathbf{R = (P_b * Q_0)/(P_a * Q_0)}$

Where R stands for the price of country A's currency in terms of country B's currency, Pa stands for the price level in country A and P_b for the price level in country B, Q_0 stands for the corresponding weights P, the price level relate to a representative bundle of items with assigned weights being the same for the two countries.

(B)Relative Version: The purchasing power parity theory measures changes or departures from the equilibrium rate of exchange. It is concerned with the relationship between changes in the domestic prices in respective countries and the changes in exchange rate. In other words, when two currencies have been inflated, the new normal rate of exchange will be determined as follow

Foreign Exchange rate –

$R_1 = (P_{b1} / P_{a1}) / (P_{bo} / P_{ao})$

Where, P_{b1} is foreign price index in current period. P_{a1} is foreign price index in base period. P_{bo} and P_{ao} are the domestic price index in current period and base period respectively.

Criticism: Purchasing Power Parity theory became very popular among economists during 1914-1924 and was accepted as a realistic explanation of the determination of foreign exchange rate under inconvertible paper currencies. Hut it has been severely criticised for its weak theoretical hate some of the critic elms are discussed as under.

(1) It assumes that there is a direct link between the purchasing power of the currencies and the rate of exchange, whereas there is no such direct relation between the two

(2) It compares the general price level in two countries without making any provisions for distinction between the price level of domestic goods and that of the internationally traded goods

(3) As the rate of exchanges is based on a comparison of Index number of prices in two countries, there are many difficulties, known as the index number problems, because of which price indices between the two countries are not comparable

(4) According to this theory, change in the price levels induces changes in exchange rate whereas in reality it is lust opposite i.e. it affects demand and hence price also.

(5) It overlooks the important factors which may cause exchange rates to deviate from the purchasing power parity.

Balance of Payments Theory:

It is also known as the general equilibrium theory of exchange rate. This theory holds that the external value of a country's currency is determined by the demand for and supply of that currency in the foreign exchange market. The demand for and supply of foreign exchange arise from the debit and credit items respectively in the balance of payments. Debit side includes all payments made by residents to foreigners during the given period and credit side includes all payments made during the same period by foreigners to residents. Since the theory assumes that the .demand for and supply of foreign exchange are determined by the position of the balance of payments it implies that supply and demand are determined mainly by factors that are independent of variations in the rate of exchange NI the monetary policy.

The balance of payments theory holds that the exchange rates are determined by the balance of payments connoting demand and supply positions of foreign exchange in the country concerned.

The balance of payments shows favourable, unfavourable or even balance according as surplus of credits, surplus of debits or equality between the two. A favourable balance of payments implying a surplus case, a greater demand for home currency in a foreign country than its available supply. As a result, the price of home currency in terms of foreign money rises. As a result, the price of foreign currency in terms of domestic currency must rise. Thus, a surplus in the balance of payments strengthens the foreign exchanges reserves and causes an appreciation in the price of hums currency in terms of foreign currency.

5.4.5. Exchange Rate Policy:

Fixed Exchange Rate:

Under fixed or pegged exchange rates all exchange transaction takes place at an exchange rate that is determine by the monetary (In India fixed exchange determine by RBI). A fixed exchange rate tells you that you can always exchange your money in one currency for the same amount of another currency. It allows you to determine how much of one currency you can trade for another.

Advantages of Fixed Exchange Rate Policy:

(A) Elimination of Uncertainty and Risk: The necessary condition for an orderly and steady growth of trade demands stability in exchange rate. Any undue fluctuations in exchange rate cause problems to the plans and programmes of both exporters and imports.

(B) Speculation Deterred: As exchange rate remains unchanged for a fairly long period of time, people expect that such rate would not change in the immediate future. This then eliminates speculation in the foreign exchange market.

(C) Prevention of Depreciation of Currency: In poor developing countries, one experiences BOP difficulties of a permanent type. Under the circumstances, any frequent changes in exchange rate will tend to aggravate the BOP crisis, like continuous depreciation of home currency in terms of currencies of other countries. In other words, unstable exchange rates result in depreciation of currencies. This can be prevented by the stable exchange rate.

(D) Adoption of Responsible Macroeconomic Policies: Stable exchange rate system prevents government from adopting irresponsible macro- economic policies like devaluation of currencies. Above all, under the fixed exchange rate system, deflationary policies can even be pursued to tide over the BOP deficit, even without bringing any change in domestic policies.

(E) Attraction of Foreign Investment: Exchange rate stability may encourage foreigners to perk their investible funds in a country. If the exchange rate changes rather frequently, it will deter them to invest in a country. Of course, such foreign investment having multiplier effect leads to higher economic growth.

(F) Anti-inflationary: Fixed exchange rate system is anti-inflationary in character. If exchange rate is allowed to decline, import goods tend to become dearer. High cost import goods then fuels inflation. Such a situation can be prevented by making the exchange rate fixed.

Disadvantage:

(A) Speculation Encouraged: In fact, uncertainty and, hence, speculative activities, tend to get a boost even under the fixed exchange rate system. Under a fixed rate system, if a country faces huge BOP deficit then the possibility of speculation gets brightened. If the speculators can guess that such BOP deficit will persist in the days ahead and the authority may go for a cut in foreign exchange rate then these people will be more enthusiastic to sell domestic currencies in the foreign exchange market.

If such sale of home currencies continues for a longer period, the central bank will then be forced to reduce exchange rate, instead of keeping it at the old fixed rate. Under the circumstance, speculators go on buying home currencies where exchange rates have been reduced. This will make these people to earn profit. The Bretton Woods System of the IMF collapsed in 1971 because of such speculation made with the US dollars.

(B) Adequacy of Foreign Exchange Reserves: For the effectiveness of a stable exchange rate, the necessary condition is the adequacy of holding, foreign exchange reserves. Poor developing countries find it difficult to maintain an adequate volume of foreign exchange reserves. Speculators then anticipate currency devaluation in advances if BOP needs to be corrected.

(C) Internal Objectives of Growth and Full Employment Sacrificed: When countries experience large and persistent deficits or 'fundamental disequilibrium' in BOP, they are down with the foreign exchange reserves. Countries then opt for devaluation of their currencies and take some internal measures to reduce their deficits.

(D) These harsh internal measures tend to contract economies. But the fallouts of these measures are rising prices and rising unemployment. These then reduce economic growth. Thus, fixed exchange rate—in the ultimate analysis—go for currency depreciation that results in lower economic growth and higher unemployment coupled with high inflation—the two most undesirable and unpleasant macro- economic variables not liked by anyone.

Flexible Exchange Rate:

Flexible, floating or fluctuating exchange rate are determined by market force. The monetary authority doses not intervene for the purpose of influencing the exchange rate. Under a regime of flexible exchange rate system, if there is as excess supply of a currency, the value of that currency in foreign exchange markets will fall. It will lead to depreciation of the exchange rate. Consequently, equilibrium will be restored in the exchange market. On the other hand, shortage of a currency will lead to appreciation of exchange rate thereby leading to restoration of equilibrium in the exchange market. These markets force operate automatically without any intervention on the past of monetary authority.

Advantages:

(A) Automatic Adjustment in BOP: The chief merit of the freely fluctuating exchange rate is that the BOP disequilibrium gets corrected automatically with the change in exchange rate. If a BOP deficit arises, there would be an excess supply of home currency leading to a fall in exchange rate simply by the market forces of demand and supply. This causes export goods cheaper and import goods dearer. As a result, export tends to rise while imports tend to decline—thereby removing deficit in the BOP account. Similarly, supply in the BOP account means excess demand for home currency and, thus, rise in the exchange rate. This, in turn, encourages imports and discourages exports. As a result, the BOP accounts will reach equilibrium by the same logic. Thus, this exchange rate makes an automatic adjustment in the BOP crisis of an economy and that too without governmental intervention.

(B) No Collusion between Internal-External Objectives: Surplus and deficit in the BOP accounts get corrected if foreign exchange rate falls and rises, respectively. In a regime of fixed exchange rate, the removal of BOP deficit requires the adoption of internal policies like fall income and price level. In other words, pegged exchange rate requires a change in domestic macroeconomic policies like deflationary policies of price and output reduction.

Disadvantage:

But, under flexible exchange rate system, a government can adopt independent monetary policy. In other words, under this system of exchange rate, internal balance could be maintained by the government. It is further argued that, as it is a self-adjusting mechanism to restore BOP equilibrium, a government can put more effort in tackling internal problems of inflation, un-employment, etc.

(A) Absorption of Sudden Shocks: In a flexible exchange rate, the domestic economy remains insulated from external shocks and pressures. Under this system, the threat of 'importing inflation' from outside the country is minimum. In other words, price feedback effect is imperceptible.

(B) Minimum Buffer of Foreign Exchange Reserves: Since exchange rate is not pegged under the floating arrangement of exchange rate, the central bank of a country need not hold adequate foreign exchange reserves as a buffer against unforeseen developments in international trade.

(C) Uncertainty and Confusion: Flexible exchange rate and trade presents an atmosphere of uncertainty and confusion in trade and investment. Susceptibility to uncertainty is greater as soon as exchange rate fluctuates freely. Suppose an Indian has despatched an export 'invoice' to the foreign buyers. But the Indian exporters do not know at what price foreign currency will be converted into Indian currency. This kind of uncertainty hampers trade. However, such uncertainty can be largely minimised through forward exchange contracts. The uncertainty involved in this kind of exchange rate may cause trading community to lose some confidence in the system.

(D) Hampering Investment: Unregulated free- floating exchange rate often discourages foreign investment as exchange rate becomes erratic and, hence, destabilising. Because of the uncertainty associated with this exchange rate involving profit and loss implications of foreign investment deals, a country might experience decumulation of capital. Hence—it is destabilising in effect.

(E) Risk, Instability, and Speculation: Flexible exchange rate encourages wide speculation since foreign exchange prices are not known in advance as in fixed exchange rate. It is because of speculation there occurs disruptive hot money flows. To put it elaborately, it can be argued that when the exchange rate tends to decline, speculators anticipate that such would continue to decline further and the possibility of the flight of money to another country will brighten. This will then cause a further fall in the exchange rate. Thus, greater the speculation against a currency, the deeper the economic crises.

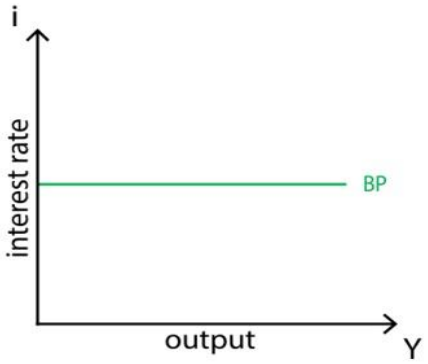
(F) Inflationary in Character: By nature, flexible exchange rate is inflationary. As soon as the exchange rate falls, automatically, consequent upon the BOP deficit, import goods become expensive. High cost of imported goods then fuels inflationary tendencies. As depreciation of a currency makes import costlier, the domestic economy faces both demand-pull and cost-push inflationary pressures. It is because of these drawbacks of the freely fluctuating exchange rate that countries attach importance to 'managed exchange rate' with their central banks buying and selling currencies in the foreign exchange market so as to moderate the degree of fluctuations as far as practicable.

5.4.6. Mundel – Flaming Model for The Case of Open Market Macroeconomics:

The IS-LM-BP model (also known as IS-LM-BP or Mundell-Fleming model) is an extension of the IS-LM model, which was formulated by the economists Robert Mundell and Marcus Fleming, who made almost simultaneously an analysis of open economies in the 60s. Basically we could say that the Mundell-Fleming model is a version of the IS-LM model for an open economy. In addition to the balance in goods and financial markets, the model incorporates an analysis of the balance of payments.

Even though both economists researched about the same topic, at about the same time, both have different analyses. Mundell's paper "Capital Mobility and Stabilization Policy under Fixed and Flexible Exchange Rates", 1963, analyses the case of perfect mobility of capital, while Fleming´s model, depicted in his article "Domestic Financial Policies under Fixed and under Floating Exchange Rates", 1962, was more realistic as it assumed imperfect capital mobility, and thus made this one a more rigorous and comprehensive model. However, nowadays, his model has lost cogency, as the actual world situation has more resemblance with total capital mobility, which corresponds better to Mundell's view.

BP curve: the balance of payments



The BP curve shows at which points the balance of payments is at equilibrium. In other words, it shows combinations of production and interest rates that guarantee that the balance of payments is viably financed, which means that the volume of net exports that affect total production must be consistent with the volume of net capital outflows. It will usually slope up since the higher the production, the higher the imports, which will disturb the equilibrium of the balance of payments, unless interest rates rise (which would cause capital inflows to maintain the equilibrium). However, depending in how great the mobility of capital is, it will have a greater or smaller slope: the higher the mobility, the flatter the curve. Once the BP curve is derived, there is an important thing to know about how to use it. Any point above the BP curve will mean a balance of payments surplus. Any points below the BP curve will mean a balance of payments deficit. This is important since depending where we are, different things may affect the interest rates.

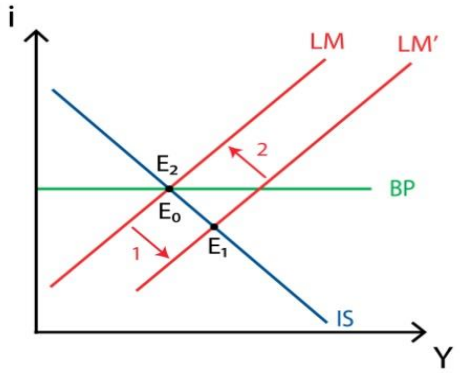
The IS-LM-BP model

In the model we distinguish between perfect and imperfect capital mobility, but also between fixed and flexible exchange rates. For each of these cases, we'll see what happens when both an expansionary monetary and fiscal policy are applied to the economy. We'll first review Mundell's model, which deals with perfect mobility. Then, we'll analyse Fleming's imperfect mobility model.

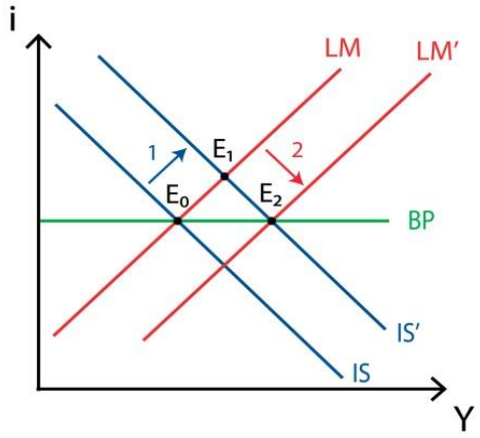
I. Perfect capital mobility

(A) Fixed exchange rate

An expansionary monetary policy will shift the LM curve to LM', which makes the equilibrium go from point E0 to E1. However, since we are below the BP curve, we know the economy has a balance of payments deficit. Since exchange rates are fixed, government intervention is required: the government will purchase domestic currency and sell foreign currency, which will drop the money supply and therefore shift the LM' curve to its original position (which makes the equilibrium go to E2). Monetary policy has therefore no effect under these circumstances.

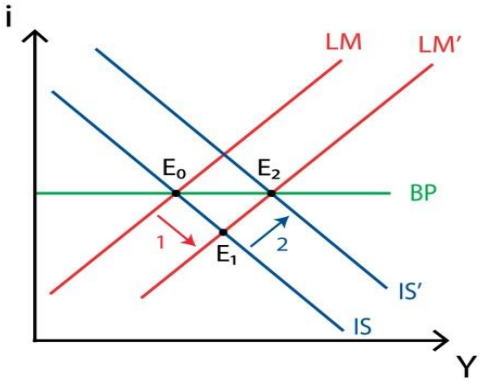


An expansionary fiscal policy will shift the IS curve to IS', moving the equilibrium form point E0 to point E1. Since the economy has now a balance of payments surplus, and because the exchange rate is fixed, government will intervene in the exact opposite way: they'll purchase foreign currency and sell domestic currency. This will increase the money supply, shifting the LM curve to the right. The final equilibrium is reached at point E2 where, at the same interest rate, production has increased greatly: fiscal policy works perfectly under these circumstances.



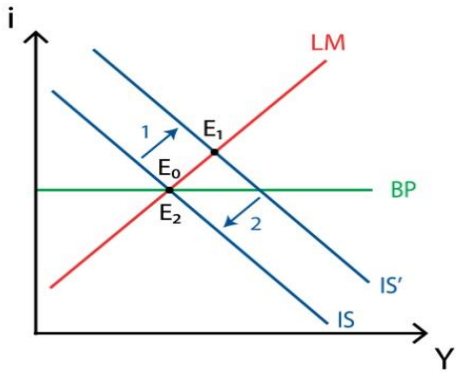
(B) Flexible exchange rate

An expansionary monetary policy will shift the LM curve to LM', which makes the equilibrium go from point E0 to E1. However, since now exchange rates are flexible, we have a different situation: the balance of payments deficit will depreciate the domestic currency. This will increase net exports (since foreigners can now buy more of our products with the same amount of money), which will shift the IS curve to the right (to IS'). The final equilibrium is reached at point E2 where, at the same interest rate, production has increased greatly: monetary policy works perfectly under these circumstances.



An expansionary fiscal policy will shift the IS curve to IS', moving the equilibrium from point E0 to point E1. The economy will therefore have a balance of payments surplus, which in this case of flexible exchange rate will appreciate the domestic currency. This will decrease net exports, since we are able to import more goods and services with less money, while foreigners will import less of our products because of our appreciated domestic currency. This drop in net

exports will shift the IS' curve back to its original position. Since now the final equilibrium E2 corresponds to the initial equilibrium, we know fiscal policy is no good in this case.

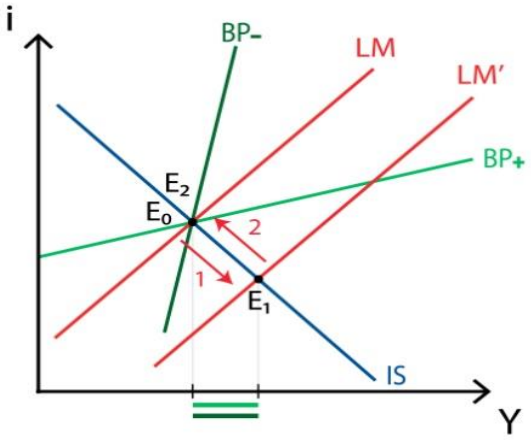


It is easy to see why Mundell devised what is known as the impossible trinity. In a few words, no economy can have the following three: perfect capital mobility, fixed exchange rates and an independent and efficient monetary policy. Under the perfect capital mobility assumption, and in order to have an efficient monetary policy, exchange rates must be flexible. Or have fixed exchange rates but assume that monetary policy won't be efficient.

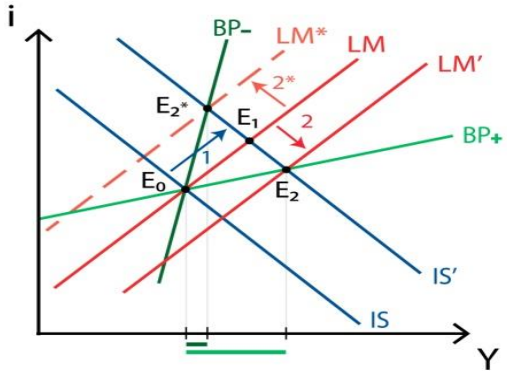
II. Imperfect capital mobility

(A) Fixed exchange rate

Here we have the exact same situation as before: an expansionary monetary policy will shift the LM curve to LM', which makes the equilibrium go from point E0 to E1. However, since we are below the BP curve, we know the economy has a balance of payments deficit. Since exchange rates are fixed, the government will purchase domestic currency and sell foreign currency, which will drop the money supply and therefore shift the LM' curve to its original position (which makes the equilibrium go to E2). Monetary policy has again no effect, no matter how great or small capital mobility is.

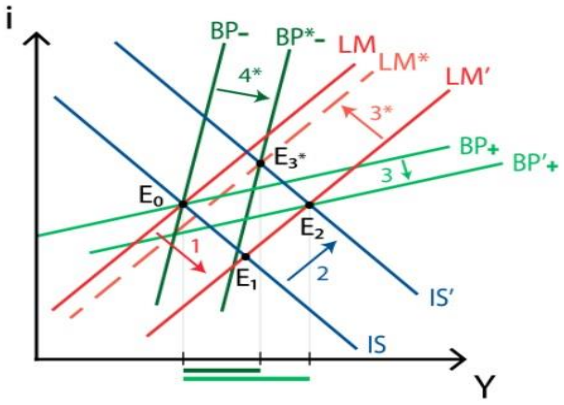


An expansionary fiscal policy will shift the IS curve to IS', moving the equilibrium from point E0 to point E1. Now, depending on capital mobility, we'll either have a balance of payments surplus (high capital mobility, BP+ curve) or a balance of payments deficit (small capital mobility, BP- curve). Since exchange rates are fixed, government will need to intervene: its acquisitions and disposals of both domestic and foreign currency will shift the LM curve to either LM' or to LM* (you can review what happens above: a balance of payments surplus is the same scenario as in a fiscal policy with perfect capital mobility and fixed exchange rates, while the balance of payments deficit corresponds to the monetary policy scenario). Under these circumstances, fiscal policy is completely efficient. It's actually the more efficient the higher capital mobility is.

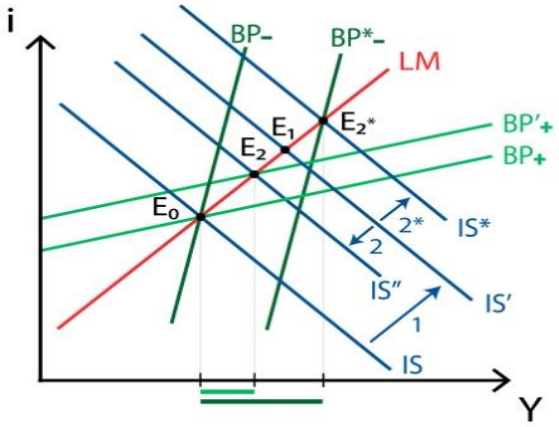


(B) **Flexible exchange rate**

An expansionary monetary policy will shift the LM curve to LM', which makes the equilibrium go from point E0 to E1. However, since now exchange rates are flexible, the balance of payments deficit will depreciate the domestic currency. This will increase net exports, shifting the IS curve to IS'. Also, since domestic assets are less expensive, the BP curve will shift to the right (to either BP'+ or BP'-). Therefore, with high capital mobility, final equilibrium will be at point E2. Monetary policy works well under these assumptions. It's actually the more efficient the higher capital mobility is.



An expansionary fiscal policy will shift the IS curve to IS', moving the equilibrium from point E0 to point E1. Now, depending on capital mobility, we'll either have a balance of payments surplus (high capital mobility, BP+ curve) or a balance of payments deficit (small capital mobility, BP- curve). In the case of a balance of payments surplus, and considering flexible exchange rates, there will be an appreciation of the domestic currency. This will decrease net exports, which will shift the IS' curve to the left. Also, since domestic assets are more expensive, the BP+ curve will shift to the left. The final equilibrium will therefore be at point E2. If there is a balance of payments deficit (the case for the BP- curve), the result will be the same one as in the monetary policy case (being E2* the final equilibrium). In this scenario, fiscal policy will be more efficient the smaller capital mobility is.



The Mundell-Fleming model is a very useful tool when dealing with the analysis of open economies. A great deal of textbooks and papers argue for or against each of these models. However, there's no denying the world is moving towards liberalizing international trade and capital movements (mostly through WTO's agreements), which would make us lean towards Mundell's view. To sum up, under perfect capital mobility, monetary policy will only work with flexible exchange rates, while fiscal policy will only work with fixed exchange rates.

Optimum Currency Area (OCA):

The optimum currency area theory is a relatively recent area of study. The pioneering work in this field was done by J.E. Meade and T. Scitovsky in 1957-58. The main credit for developing this analysis, however, goes to Mundell (1961) and McKinnon (1963).

According to Mundell, optimum currency area is a region which leads automatically to a complete elimination of unemployment and the BOP disequilibrium. In a currency area, either there is a common currency or the currencies of a group of countries are linked through a permanently fixed exchange rate.

The currencies of the member countries of a union could then float jointly with respect to the currencies of the non-member countries. Mundell pointed that there would be an automatic achievement of internal and external equilibria in the countries of a currency area without either the policy of flexible exchange rates or the government intervention through monetary and fiscal policies, provided there were free mobility of labour and capital through the currency area.

Condition of the member country Under OCA:

(i) There should be greater resource mobility among the different member countries.

(ii) There should be close structural similarities among the member countries.

(iii) There should be similar propensities to inflation and BOP disequilibrium among the member countries.

(iv) The benefit-cost ratio of having a fixed or common exchange rate should be the highest possible.

(v) There should be greater willingness among the member countries to co-ordinate their monetary, fiscal and other policy.

Benefit of OCA:

The formation of an optimum currency area can result in several benefits for the member countries.

1. The formation of a currency area eliminates the uncertainty that often results from flexible or continuously changing exchange rates.

2. The optimum currency area promotes specialization in production and expanded flow of trade and investments among the member countries.

3. The whole region or area having a common currency or fixed exchange rate is treated as a single large market.

4. The formation of optimum currency union ensures the benefits accruing from the economies of scale.

5. The stability of exchange rate leads to a greater stability in prices in the member countries.

6. The internal price stability encourages the use of money as a store of value and to effect transactions. The inefficient barter deals arising under inflationary conditions get discouraged.

7. The formation of an optimum currency area saves the cost of official intervention in foreign exchange markets involving the currencies of member countries, cost of exchanging one currency into another and the cost of hedging.

SUB UNIT 5
INTERNATIONAL MONETARY SYSTEM

5.5.1. Meaning

International monetary system (IMS) refers to the customs, rules, instruments, facilities, and organisations facilitating international (external) payments. Sometimes the IMS is also referred to as an international monetary order or regime.

5.5.2. International Gold Standard:

The gold standard is a monetary system in which the value of the basic monetary unit such as dollar or pound sterling is fixed in terms of gold. To maintain the link between the standard money and gold the monetary authority provides free convertibility of currency into gold and vice versa. It will also maintain the fixed price of gold by selling and buying gold as may be necessary.

Types of Gold Standard

(1) Gold Coin Standard: This form of gold standard was in operation in many countries till the outbreak of the first world Nvar. The main characteristics are:

(a) All other forms of money such as currency notes were convertible into gold coins.

(b) There were no restrictions on the inflow and outflow of gold as between gold standard countries.

(2) Gold Bullion Standard: This came into existence a few years after the end of the world war. The main characteristics of gold billion standard are:

(a) Foreign trade and gold flows were absolutely free.

(b) The value of the basic monetary unit was fixed in terms of a particular weight of gold.

(c) The link between the basic monetary unit and gold was maintained by the monetary authority by means of an undertaking to sell gold bars of a prescribed weight at the official price in exchange for currency notes.

Advantages of International Gold Standard:

(1) **International Medium of Exchanges:** The international gold standard is concerned with the external value of the currency and with problem of maintaining the stability of foreign exchange. Thus, it worked as an international medium of exchange.

(2) Stability of Exchange Rates: Another advantage of the gold standard was that it maintained stable exchange rates between countries. The exchange rate of every country was fixed in terms of its mint par or the gold value of its currency

(3) Parity of Price Levels: The international gold standard secured relative parity of rice level between different countries of the world.

(4) **Automatic *Laissez Faire* Standard:** the international gold standard had the merit of working without any outside interference by any other country or international authority. Thus, international gold standard automatically established *laissez faire* policy.

• Condition For the Success of International Gold Standard

(1) **Observance of the Rules of the Gold Standard:** The international gold standard functions smoothly provided "the rules of the game" are observed. These rules are not complex but easy to understand and follow for the countries.

(2) **Maintenance of Exchange Rate Stability:** For the success of international gold standard, it is necessary to maintain exchange rate stability. Exchange rate stability could be maintained by making adjustment in the internal prices levels of countries.

(3) **Wages Flexibility:** To maintain stability in internal prices, wage rates should be stable. The gold standard depends very much on relative stability of internal prices.

(4) **Policy of Free Trade:** Free trade is pre-condition for the success of international gold standard. Imposition of high tariffs especially by the creditor countries restricts imports from debtor countries. Thus restrictions on free trade may lead countries to abandon the gold standard.

(5) **Absence of Debt**: The imposition of reparations and the insistence on the repayment of war debts makes it difficult for the foreign market to be controlled by the weapons of the gold standard.

5.5.3. Bretton Woods System:

Prior to World War I (1914-18) almost all major national currencies were on the gold standard and, therefore, they adopted what might be said to be the system of fixed foreign exchange rate system based on the international gold standard.

During the world war it almost all the countries involved in the war directly and indirectly introduced and practised a rigorous system of exchange controls.

With the establishment of the IMF under the Bretton Woods Agreement after World War II, exchange rates between countries were set or pegged in terms gold or the US dollar at S 35 per ounce of gold. This related to a fixed exchange within a band of one percent. But this was only allowed when the country could convince the IMF authorities that there was fundamental disequilibrium in its balance of payments. This system is known as Bretton Woods system.

The Group of Ten brought about the Smithsonian Agreement on 18th Dec. 1971. They agreed to adopt a system of exchange rate with wider bands.

Another significant development in the sphere of international monetary system took place when the EEC (European Economic Community) countries decided to limit the fluctuations of their currencies relative to each other to a smaller band. This came to be known as "the snake in the tunnel'.

The Smithsonian Agreement broke down following the US dollar devaluation in February 1973. At the beginning of March 1973, India, Canada, Japan, Switzerland, the UK and several smaller countries had floating exchange rates. However, the 'joint float' of the EEC countries continued even after March 1973 and was now called the "snake in the lake," as there was no band within which the EEC currencies could fluctuate relative to other currencies.

The Jamaica Agreement of January 1976 formalised the regime of floating exchange rates under the auspices of the IMF. A number of factors forced the majority of member countries of the IMF to float their currencies.

By the Second Amendment of the IMF charter in 1978, the member countries are not expected to maintain and establish par values with gold or dollar. The system of floating exchange rates is not one of free flexible exchange rates but of managed floating.

5.5.4. International Monetary Fund (IMF):

The International Monetary Fund (IMF), also called the Fund, is an international institution established by 44 nations under the Bretton Woods agreement of July 1944. The principal aim was to avoid the economic mistakes of the 1920s and 1930s. The attempts of many countries to return to the old gold system after the First World War failed miserably. The world depression forced every country to abandon the gold standard. This led to the adoption of purely nationalistic policies whereby almost every country imposed trade restrictions, exchange controls and resorted to exchange depreciation in order to encourage its exports. This further brought a marked decline in world trade and extension of depression. It was against this background that 44 nations assembled at the United Nations Monetary and Financial conference at Bretton Woods, from 1st July to 22nd July, 1944. Thus the IMF was established to promote economic and financial cooperation among its members in order to facilitate the expansion and balanced growth of world trade. It started functioning from 1st March, 1947. At present, 189 nations are members of the IMF. Republic of Nauru became the newest member in 12 April, 2016.

Objectives of IMF: As stated in the article of agreement of IMF the following objectives have been emphasised:

(i) Promotion of international monetary co-operation.

(ii) Facilitate the expansion and balanced growth of international trade and to contribute thereby to the promotion and maintenance of high levels of employment and real income and to the development of the productive resources of all members as primary objectives of economic policy.

(iii) Promotion of exchange rate stability and avoidance of competitive currency depreciation.

(iv) Expansion of international trade by removal of all exchange controls and restrictions and provide for multilateral convertibility of currencies.

(v) To help member countries with fund during the periods of temporary difficulties in respect of balance of payments.

Organisation of IMF: The Board of Governors of the IMF consists of one Governor and one Alternate Governor from each member country. For India, Finance Minister is the Ex-officio Governor while the RBI Governor is the Alternate Governor on the Board.

The day-to-day management of the IMF is carried out by the Managing Director who is Chairman (currently, Ms Kristalina Georgieva) of the Board of Executive Directors. Board of Executive Directors consists of 24 directors appointed/ elected by member countries/group of countries—is the executive body of the IMF. India is represented at the IMF by an Executive Director (currently Dr. Rakesh Mohan), who also represents three other countries in India's constituency, viz., Bangladesh, Sri Lanka and Bhutan.

The IMF Quotas: When a country becomes a member of the IMF, it is assigned a quota of subscription, its voting power and drawing rights. The member-country's subscription-quota is based on its national income and its position in international trade. At the time of the formation of the IMF each member was required to pay 25 percent of its quota in gold or 10 percent of its net official holdings of gold and US dollars whichever was less. The remaining 75 percent of the quotas was to be furnished in the country's own currency which was kept in the country's central bank. The practice of gold reserves by the member-countries with the IMF was discontinued from April 1978 and the IMF has been delinked from gold since then. At present, each member country is allowed to maintain the par value of its currency and its quotas in terms of the Special Drawing Rights (SDRs).

In order to meet 4he financial requirements of the Fund, the quotas are reviewed every five years and are raised from time to time. When the Fund started operation in March 1947 the total quotas were 7.6 billion dollars which had been increased to SDR 90.1 billion on 30 March 1984 with the implementation to the Eighth General Review of Quotas. And in June 1990, the Board of Governors adopted a resolution proposing a 50 per cent increases in total quotas for the Ninth Review from SDR 90.1 billion to SDR 135.2 billion. With the 11th Review of Quotas effective March 1998, the quotas were raised by 45% to SDR 2112 billion. Total quotas at end-August 2005 were SDR 213 billion (about $ 312 billion).

Quotas are denominated in Special Drawing Rights (SDRs) the IMF's unit of account. The largest member of the IMF is the United States, with the quota of SDR 371 billion (about $ 54.2 billion) and the smallest member is Palau, with a quota of SDR 3.1 million (about $ 4.5 million).

Function of Quotas: Functions of Quotas: A member's quota delineates basic aspects of its financial and organizational relationship with the IMF, including,

Subscriptions: A member's quota subscription determines the maximum amount of financial resources the member is obliged to provide to the IMF. A member must pay its subscription in full upon joining the Fund : up to 25 per cent must be paid in SDRs or widely accepted currencies (such as the U.S. dollar, the euro, the yen. or the pound sterling), while the rest is paid in the member's own currency.

Voting Power: The quota largely determines a member's voting power in IMF decisions. Each IMF member has 250 basic votes plus one additional vote for each SDR 100,000 of quota. Accordingly, the United States has 371,743 votes (17.1 percent of the total), and Palau has 281 votes (0.013 per cent of the total).

Access to Financing: The amount of financing a member can obtain from the IMF (its access limit) is based on its quota. Under Stand-By and Extended Arrangements, for instance, a member can borrow up to 100 per cent of its quota annually and 300 per cent cumulatively. However, access may be higher in exceptional circumstances.

SDR Allocations: A members' share of general SDR allocations is established in proportion to its quota. Quota Reviews

> **SDR:** Special drawing rights (SDR) refer to an international type of monetary reserve currency created by the International Monetary Fund (IMF) in 1969 that operates as a supplement to the existing money reserves of member countries. Created in response to concerns about the limitations of gold and dollars as the sole means of settling international accounts, SDRs augment international liquidity by supplementing the standard reserve currencies.

Functions of the Fund: The Fund performs five major functions.

(i) It serves as a short term credit institution, if any country is in temporary difficulty in liquidating an adverse balance of payments, the Fund will come to its aid.

(ii) The Fund provides a mechanism for improving short-term balance of payments position.

(iii) The Fund provides machinery for international consultations.

(iv) It provides reservoir of the currencies of the member countries and enables members to borrow one another's currency.

(v) It promotes orderly adjustment of exchange rates to promote exchange stability.

Exchange Rate Policy of the IMF: According to the Articles of Agreement, each country should express the par value of its currency in terms of gold or U.S. dollar. the idea behind this being to create the regime of stable exchange rates with orderly and stable exchange rates. The IMF was obliged to agree to a change in the par value of plus or minus one percent, a future change of plus or minus one per cent required the permission of the IMF. But since 1971, these provisions of the IMF have been changed. The IMF system of exchange rates has moved since 1971 from fixed or stable exchange rates to floating and flexible exchange rates.

Lending Operations of the IMF: The IMF is an important international institution. The financial resources at its disposal come from quota subscription of the member-countries. The IMF can increase its financial resources by selling gold to its member countries or by borrowing from governments or central banks of member countries or from the Bank of International settlements or if needed from the OPEC.

According to the provisions of IMF, a member country can borrow from the Fund by purchasing the needed foreign currencies in exchange of its own currency up to 100 per cent of its quota and 300 percent cumulatively. However access may be higher in exceptional circumstances. However, during any one year, a country can borrow (i.e.. purchase) foreign currencies only up to 25 per cent of its quota's limit.

The IMF will grants loans to member countries to correct disequilibrium in their balance of payments position, but such disequilibrium must be of a temporary type.

Thus, the IMF gives short-term loans to member countries to correct temporary disequilibrium in balance of payments position of member-countries.

India and the IMF: India joined the IMF on December 27, 1945. As a founder-member of the IMF, India was initially assigned quotas of $ 400 million or about 5.2 percent of the total. Being the fifth largest quota holder, India was also given a seat on the IMF's Executive Board with successive reviews, however, India's quota share has dwindled. India's present quota at SDR 4,158.20 million of which Fund Holding of currency is 3,527.3 SDR. (84.83%) and Reserve position holding Exchange Rate is 630.97 SDRs. (15.17%).

As a member of the Fund, India has derived following benefits :
(a) Foreign exchange for meeting balance of payments deficits;
(b) Oil facility from the IMF.
(c) Assistance from the IMF.
(d) Aid from the World Bank.
(e) Assistance under the Extended Credit Facility.

Conclusion: The role and responsibility of the IMF has been increasing with passage of time since its inception. It has been helping members especially developing countries in many ways. It provided technical advice through its experts, besides programmes for officials of central banks have new visions in the monetary arena.

It has cooperated with many international organisations such as the World Bank and the GATT to promote economic developments to primary producing nations.

It is appropriate to say that IMF has been rendering a very useful service to international institutions. In the initial stages it was slightly shaky and its services were riot found useful of necessary, but over the years, the Fund has demonstrated its usefulness to member-countries.

5.5.5. World Bank:

The World Bank (WB) Group today consists of five closely associated institutions propitiating the role of development in the member nations in different areas. A brief account is as follows –

5.5.6. International Bank For Re-construction and Development (IBRD):

The International Bank for Reconstruction and Development is the oldest of the WB institutions which started functioning (1945) in the area of reconstruction of the war-ravaged regions (World War II) and later for the development of the middle-income and credit-worthy poorer economies of the world. Human development was the main focus of the developmental lending with a very low interest rate (1.55 per cent per annum)—the areas of focus being agriculture, irrigation, urban development, healthcare, family welfare, dairy development, etc. It commenced lending for India in 1949.

Objects:

The objectives of the IBRD are as follows :

(i) To assist in reconstruction and development of the territories facilitating investment of capital for productive purposes.

(ii) To promote foreign private investment by means of guarantees or through participation in loans and other investments made by private investors.

(iii) To make arrangements for loans or guarantees in respect of international loans so that large and small useful projects are rendered assistance.

(iv) To promote the long-range balanced growth of international trade and the maintenance of equilibrium in the balance of payments of member countries by encouraging international investment for the development of the productive resources of members.

Lending Operations of the World Bank: Following are the ways in which the World Bank gives loans to its member's countries:

(I) By granting or participating in direct loans, out of its own funds.

(2) Making loans out of raised or borrowed funds.

(3) Guaranteeing loans made by the private sector.

While making loans the Bank ensures the following

(1) The projects have been carefully examined by the experts and merits demonstrated.

(2) The loans are for reconstruction or development.

(3) If the central bank of the member country gives full guarantee for repayment of the principal interest on loan and other related charges,

(4) The project for which the loan from the World Bank is being sought is recommended by a competent committee after a careful study in its written report.

(5) The borrower is in a position to meet the Bank's obligations.

Normally the Bank makes medium and long term loans, The Bank also provides technical assistance US its members through its various survey missions such as Project Preparation Facilities (PPF), Economic Development Institute (EDI) etc.

5.5.7. International Development Agency (IDA):

The International Development Agency (IDA) which is also known as the soft window of the WB was set up in 1960 with the basic aim of developing infrastructural support among the member nations, long-term lending for the development of economic services. Its loans, known as credits are extended mainly to economies with less than $895 per capita income. fte credits are for a period of 35–40 years, interest-free, except for a small charge to cover administrative costs. Repayment begins after a 10-year grace period. ftere was no human angle to its lending. But now there remain no hard and fast differences between the purposes for the IBRD and IDA lending.

Every year developing nations make enough diplomatic attempts to carve out maximum loan disbursal for themselves. India had been the biggest beneficiary of the IDA support. For total support (IBRD + IDA) for India had been $ 91.81 billion till date.

5.5.8. International Finance Corporation (IFC):

The International Finance Corporation (IFC) was set up in 1956 which is also known as the private arm of the WB. It lends money to private sector companies of its member nations. The interest rate charged is commercial but comparatively low. There are many attractive features of IFC’s lending. It finances and provides advice for private-public ventures and projects in partnership with private investors and, through its advisory work, helps governments of the member nations to create conditions that stimulate the flow of both domestic and foreign private savings and investment.

It focuses on promoting economic development by encouraging the growth of productive enterprises and efficient capital markets in its member countries. It participates in an investment only when it can make a special contribution that complements the role of market investors (as a foreign financial investor (FFI). It also plays a catalytic role, stimulating and mobilising private investment in the developing world by demonstrating that investments there too can be profitable.

We have seen a great upsurge in the IFC investments in India which has undoubtedly strengthened the foreign investors' confidence in Indian Economy

5.5.9. Multinational Investment Guarantee Agency (MIGA):

The Multinational Investment Guarantee Agency (MIGA), set up in 1988 encourages foreign investment in developing economies by offering insurance (guarantees) to foreign private investors against loss caused by non-commercial (i.e., political) risks, such as currency transfer, expropriation, war and civil disturbance. It also provides technical assistance to help countries disseminate information on investment opportunities.

5.5.10. International Centre for Settlement Investment Disputes (ICSID):

The International Centre for Settlement Investment Disputes (ICSID), set up in 1966 is an investment dispute settlement body whose decisions are binding on the parties. It was established under the 1966 Convention on the Settlement of Investment Disputes between States and Nationals of Other States. Though recourse to the centre is voluntary, but once the parties have agreed to arbitration, they cannot withdraw their consent unilaterally. It settles the investment disputes arising between the investing foreign companies and the host countries where the investments have been done.

India is not its member (that is why the Enron issue was out of its preview). It is believed that being signatory to it encourages the foreign investment flows into an economy, but risks independent sovereign decisions, too.

5.5.7. Asian Development Bank (ADB):

The World Bank had been trying to set up regional development banks and some regional banks have been established for developing countries in Latin America, Africa and Asia.

The Asian Development Bank popularly known as the ADB was set up in December in 1966. It is a multinational regional development bank established for the purpose of lending funds, promoting investment and providing technical assistance to the developing member countries and generally for fostering the economic growth and co- operation in the Asian region. Its headquarters are located at Manila in Philippines.

ADB is managed by a Board of Governors, a Board of Directors, a president, four vice-presidents and the heads of departments and officers.

Each member country nominates one Governor and an alternate governor to vote in its behalf.

The Board of Governor elects the 12 Directors (each with an alternate) eight representing countries within the Asia-Pacific region and four representing countries outside the region. The Board of governors also elects the President for a term of five years, with the possibility of re-election.

Objectives and Functions of the ADB: The basic objective behind the establishment for the ADB is to promote economic development of and mutual cooperation among the countries of Asia. The ADB's objective is to help accelerate the process of economic development of developing countries in the Asian region.

To realise the objective the ADB performs the following functions

(I) To promote investment of public and private capital for economic development of Asian countries.

(2) To channelize investible funds of the ADB for the implementation of those projects which are important for the development of major sectors of the country's economies.

(3) To render assistance to member-countries in coordinating their programmes and policies of economic development and at the same time to promote inter-regional trade and cooperation among countries of the Asian region.

(4) To promote technical assistance for the execution of projects.

(5) To mobilise funds for economic development of member-countries by extending cooperation to the World Bank, ESCAP and other United Nations bodies and public as also private institutions located among member - countries.

5.5.12. The General Agreement on Tariff and Trade (GATT):

The General Agreement on Tariff and Trade (GATT) came into existence in 1948. GATT was a multilateral treaty which was signed by 92 countries. The GATT was neither an organization nor court of justice. It was simply a multi-national treaty which covered 80 per cent of the world trade. It was a decision making body with a code of rules for the conduct of international trade, and a mechanism for trade liberalisation. It was a forum where the contracting parties meet from time to time to discuss and solve their trade problems, and also negotiate to enlarge their trade. The GATT rules provides for the settlement of trade disputes call for consultations, main trade obligations, and even authorise retaliatory measures.

The GATT was a permanent international organisation having a permanent council of representative with headquarters at Geneva. Its function was to call international conferences to decide on trade liberalisation on a multilateral basis.

Objectives of GATT: The objectives of the GATT were based on a few fundamental principles contained in the code of International Trade Conduct. The general objectives of the GATT were:

(1) To bring about improvement in the standard of living of the people in member countries;

(2) To encourage full employment and steady and growing level of real income and effective demand;

(3) To bring about expansion of world trade and world production; and

(4) To enable full use of the world's resources.

The GATT proposes to achieve the above objectives through the following methods :

(I) **Principle of Most Favoured Nation Clause:** This clause means that each member country of GATT shall be treated as the most favoured nation.

(2) Quantitative Restrictions on Imports: The GATT rules, as a matter of principle, prohibit the use of import quota fixation. But the following three important exceptions were allowed to this rule : (i) Countries which are facing balance of payments difficulties may use the device of import quota fixation (ii) Under-developed countries may resort to quota fixation but only under procedure approved by the GATT. (iii) Quotas may be applied to agricultural and fishery products. if domestic production is subject to equally restrictive controls.

(3) Tariff Negotiation and Reduction of Tariff: The GATT recognises that tariffs are often an important obstacle to international trade. The GATT makes provisions for taking into consideration the needs of developing countries to maintain tariff also for revenue purpose.

The important rules relating to tariff negotiations are: (i) Reciprocity and mutuality (ii) Reduction of tariff or imposing tariff at low rates.

(4) Settlement of Disputes: Under the existing GATT dispute settlement procedures, complaints may be brought against actions that violate the rules or impede the objectives of General Agreement.

GATT Rounds of Global Trade Negotiations: Since 1947, seven "round (conference) of global trade negotiations under the GATT have taken place and the eighth, the Punta Del Estate (Uruguay) started in September 1916

The first conference on trade negotiations was held at Geneva in 1947, the second at Annecy (France) in 1949, the third at Torquay (England) in 1950-51, the fourth at Geneva (Switzerland) in 1955-56, the fifth at Geneva between 1954-62 (Dillon Round), the sixth at Geneva between 1962-63 (Kennedy round) and the seventh at Tokyo (Japan), between 1973-79. These conferences have led to reduction or stabilization of more than 60,000 tariff rates and to a number of non-tariff agreements among contracting parties covering 80 percent of the world trade.

The Uruguay Round

In December 1993, the Uruguay Round, the eighth and most ambitious round of multilateral trade negotiations in history, in which 123 countries participated, was completed after seven years of tortuous negotiations. The Round had started in Punta del Este in Uruguay in September 1986 and had been scheduled to be completed by December 1990, but disagreements between the United States and the European Union (EU), especially France, on reducing agricultural subsidies delayed its conclusion for three years. The aim of the Uruguay Round was to establish rules for checking the proliferation of the new protectionism and reverse its trend; bring services, agriculture, and foreign investments into the negotiations; negotiate international rules for the protection of intellectual property rights; and improve the dispute settlement mechanism by ensuring more timely decisions and compliance with GATT rulings. The agreement was signed by the United States and most other countries on April 15, 1994, and took effect on July 1, 1995.

(A) Tariffs: Tariffs on industrial products were to be reduced from an average of 4.7 percent to 3 percent, and the share of goods with zero tariffs was to increase from 20–22 percent to 40–45 percent; tariffs were removed altogether on pharmaceuticals, construction equipment, medical equipment, paper products, and steel.

(B) Quotas: Nations were to replace quotas on agricultural imports and imports of textiles and apparel (under the Multifiber Agreement) with less restrictive tariffs by the end of 1999 for agricultural products and by the end of 2004 for textiles and apparel; tarrifs on agricultural products were to be reduced by 24 percent in developing nations and by 36 percent in industrial nations, and tariffs on textiles were to be cut by 25 percent.

(C) Antidumping: The agreement provided for tougher and quicker action to resolve disputes resulting from the use of antidumping laws, but it did not ban their use.

(D) Subsidies: The volume of subsidized agricultural exports was to be reduced by 21 percent over a six-year period; government subsidies for industrial research were limited to 50 percent of applied research costs.

(E) Safeguards: Nations could temporarily raise tariffs or other restrictions against an import surge that severely harmed domestic industry, but it barred countries from administering health and safety standards unless based on scientific evidence and not simply to restrict trade. For example, a nation could only keep out beef imports from cattle raised with growth hormones by showing that the beef so produced was unsafe for human consumption.

(F) Intellectual property: The agreement provided for 20-year protection of patents, trademarks, and copyrights, but it allowed a 10-year phase-in period for patent protection in pharmaceuticals for developing countries.

(G) Services: The United States failed to secure access to the markets of Japan, Korea, and many developing nations for its banks and security firms, and did not succeed in having France and the European Union lift restrictions on the showing of American films and TV programs in Europe.

(H) Other industry provisions: The United States and Europe agreed to continue talking about further limiting government subsidies to civil aircraft makers, opening up the distance telephone market, and limiting European subsidies to steelmakers; the United States also indicated that it intended to continue negotiating the further opening of the Japanese computer chip market.

(I) Trade-related investment measures: The agreement phased out the requirement that foreign investors (such as automakers) buy supplies locally or export as much as they import.

(J) World Trade Organization: The agreement also called for the replacement of the General Agreement on Tariffs and Trade (GATT) secretariat with the World Trade Organization (WTO) in Geneva with authority not only in trade in industrial products but also in agricultural products and services.

5.5.13 World Trade Organisation (WTO):

The WTO is founded on the General Agreement on Tariffs and Trade (GATT), which entered into force on 1 Jan. 1948. Its 23 original signatories were members of a Preparatory Committee appointed by the UN Economic and Social Council to draft the charter for a proposed international Trade Organization. Since this charter was never ratified, the General Agreement remained the only international instrument laying down trade rules. In December 1993 there were III contracting parties, and a further 22 countries applying GATT rules on a de facto basis. On 15 April 1994 trade ministers of 123 countries signed the Final Act of the GATT. Uruguay Round of negotiations at Marrakesh. bringing the WTO into being on 1 January 1995. As of 29 July 2016 the WTO had 164 members.

Function of WTO:

1. **Agreement on Agriculture(AOA)**: The WTO Agriculture Agreement provides a framework for the long-term reform of agricultural trade and domestic policies, with the aim of leading to fairer competition and a less distorted sector

   The Agreement Covers:

   (i) **Market access** — the use of trade restrictions, such as tariffs on imports.

   (ii) **Domestic support** — the use of subsidies and other support programmes that directly stimulate production and distort trade.

   (iii) **Export competition** — the use of export subsidies and other government support programmes that subsidize exports.

Agriculture Domestic Subsidies: The subsidies provided by the government to the agricultural sector is termed by the WTO as Aggregate Measure of Support (AMS). But Subsidies can be distorted free trade situation. Therefore, the specific reason WTO give permission to a country for subsidies. The agriculture subsidies in the WTO terminology have in general been identified by 'boxes' which have been given the colours of the traffic lights—green (means permitted), amber (means slow down, i.e., to be reduced) and red (means forbidden). The WTO provision on agriculture has nothing like red box subsidies.

Amber Box: All subsidies which are supposed to distort production and trade fall into the amber box

Blue Box: This is the amber box with conditions. The conditions are designed to reduce distortions. Any subsidy that would normally be in the amber box, is placed in the blue box if it requires farmers to go for a certain production level.

Green Box: The agricultural subsidies which cause minimal or no distortions to trade are put under the green box.70 They must not involve price support.

Social And Development Box: Other than the above-discussed highly controversial boxes of agricultural subsidies, the WTO provisions have defined yet another box, i.e., the Social and Development Box (S & D Box)75 allows the developing countries for some subsidies to the agriculture sector under certain conditions. These conditions revolve around human development issues such as poverty, minimum social welfare, health support, etc.

2. Non-Agriculture Market Access (NAMA):

Non Agricultural Market Access (NAMA) relates to trade negotiations on non-agricultural or industrial products. In the NAMA negotiations, WTO Members discuss the terms or modalities for reducing or eliminating customs tariff and non-tariff barriers on trade in industrial products. The product coverage under NAMA includes marine products, chemicals, rubber products, wood products, textiles and clothing, leather, ceramics, glassware, engineering products, electronics, automobiles, instruments, sports goods and toys.

On tariffs, the negotiations take place on the bound tariff which are the bindings taken during the negotiations at the WTO. The bound tariffs are the upper limit of the applied customs tariff which are the tariffs actually applied by the Customs authorities on imports into any country.

3. The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS):

TRIPS is an international legal agreement between all the member nations of the WTO. It sets down minimum standards for the regulation by national governments of many forms of intellectual property (IP) as applied to nationals of other WTO member nations. Specifically, TRIPS requires WTO members to provide copyright rights, covering authors and other copyright holders, as well as holders of related rights, namely performers, sound recording producers and broadcasting organisations; geographical indications; industrial designs; integrated circuit layout-designs; patents; new plant varieties; trademarks; trade names and undisclosed or confidential information. The TRIPS agreement introduced

intellectual property law into the multilateral trading system for the first time and remains the most comprehensive multilateral agreement on intellectual property to date. In 2001, developing countries, concerned that developed countries were insisting on an overly narrow reading of TRIPS, initiated a round of talks that resulted in the Doha Declaration.

Name of Organisation	Establishment Date	No. of Member Country	Main Objective
IMF	1945	189	International monetary cooperation and exchange rate stability.
IBRD	1944	189	To provide long-run capital to member country for economic development.
IFC	1956	184	To assist economic development by encouraging growth of private enterprise.
IDA	1960	173	Provision of financial assistance to less developed country.
MIGA	1988	181	Improve people standard of living in LDCs through foreign direct investment.
ICSID	1966	161	Provides facilities for the conciliation and arbitration of dispute between member countries and investors.
ADB	1966	68	To foster the economics growth of the Asian and Specific regions.
WTO	1995	164	To ensure that trade flows as smoothly, predictably and freely as possible.

5.5.14. Eurocurrency Market:

Eurocurrency refers to commercial bank deposits outside the country of their issue. For example, a deposit denominated in U.S. dollars in a British commercial bank (or even in a British branch of a U.S. bank) is called a Eurodollar. Similarly, a pound sterling deposit in a French commercial bank or in a French branch of a British bank is a Eurosterling, a deposit in euros (the new European currency) in a Swiss bank is simply a Eurodeposit (to avoid the awkward "Euroeuro"), and so on. These balances are usually borrowed or loaned by major international banks, international corporations, and governments when they need to acquire or invest additional funds. The market in which this borrowing and lending takes place is called the Eurocurrency market.

Initially, only the dollar was used in this fashion, and the market was therefore called the Eurodollar market. Subsequently, the other leading currencies (the German mark, the Japanese yen, the British pound sterling, the French franc, and the Swiss franc) began also to be used in this way, and so the market is now called the Eurocurrency market. The practice of keeping bank deposits denominated in a currency other than that of the nation in which the deposit is held has also spread to such non-European international monetary centers as Tokyo, Hong Kong, Singapore, and Kuwait, as well as to the Bahamas and the Cayman Islands in the Caribbean, and are appropriately called offshore deposits. Often, however, the name Eurodeposits is also used for such deposits outside Europe. With these geographical extensions, the Eurocurrency market has become an essentially 24-hour-a-day operation. Indeed, any foreign deposit made in a nation's bank (even if in the nation's currency) is Eurocurrency if the deposit is exempted from the regulations that the nation imposes on domestic deposits.

There are several reasons for the existence and spectacular growth of the Eurocurrency market during the past four decades. One reason was the higher interest rates often prevailing abroad on short-term deposits. Until it was abolished in March 1986, Federal Reserve System Regulation Q put a ceiling on the interest rates that U.S. member banks could pay on deposits to levels that were often below the rates paid by European banks. As a result, short-term dollar deposits were attracted to European banks and became Eurodollars. Another important reason is that international corporations often found it very convenient to hold balances abroad for short periods in the currency in which they needed to make payments. Since the dollar is the most important international and vehicle currency in making and receiving international payments, it is only natural for a large proportion of the currency to be in Eurodollars. Still another reason is that international corporations can overcome domestic credit restrictions by borrowing in the Eurocurrency market.

The Eurocurrency market originated from the desire of communist nations to keep their dollar deposits outside the United States during the early days of the Cold War for fear that they might be frozen in a political crisis. After 1973, the impetus to the growth of the Eurodollar market came from the huge dollar deposits from petroleum-exporting countries arising from the many fold increases in the price of petroleum. These nations also did not want to keep their dollar deposits in the United States for fear that the U.S. government might freeze them in a political crisis. Indeed, this is exactly what happened to the (small proportion of the) dollar deposits that Iran and Iraq did keep in the United States during the U.S. conflict with these nations in the late 1970s and early 1990s, respectively.

European banks are willing to accept deposits denominated in foreign currencies and are able to pay higher interest rates on these deposits than U.S. banks because they can lend these deposits at still higher rates. In general, the spread between lending and borrowing rates on Eurocurrency deposits is smaller than that of U.S. banks. Thus, European banks are often able to pay higher deposit rates and lend at lower rates than U.S. banks. This is the result of

(1) The fierce competition for deposits and loans in the Eurocurrency market,

(2) The lower operating costs in the Eurocurrency market due to the absence of legal reserve requirements and other restrictions on Eurocurrency deposits (except for U.S. branches of European banks),

(3) Economies of scale in dealing with very large deposits and loans, and

(4) Risk diversification. Arbitrage is so extensive in the Eurocurrency market that interest parity is generally maintained.