International Economics

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What Is International Economics?

- International economics is a field of study that assesses the implications of international trade, international investment, and international borrowing and lending.
- An **economics** field of study that applies both macroeconomic and microeconomic principles to **international** trade, which is the flow of trade among nations, and to**international** finance, which is the means of making payment for the exchange of goods among nations.

The Globalization of the World Economy

- We live in a globalized world. We can connect instantly with any corner of the world by cellular phone, e-mail, instant messaging, and teleconferencing, and we can travel anywhere incredibly fast.
- Tastes are converging (i.e., more and more people all over the world generally like the same things) and many goods we consume are either made abroad or have many imported parts and components. Many of the services we use are increasingly provided by foreigners. Even small companies that until a few decades ago faced only local or regional competition now must compete with firms from across the globe.
- Although not as free as the flow of international trade in goods and services, millions of workers at all skill levels have migrated around the world, and thousands of jobs have moved from advanced countries to such emerging markets as India and China.

- Finance has also globalized: We can invest in companies anywhere in the world and purchase financial instruments (stocks and bonds) from any company from almost anywhere in the world. A financial crisis in one financial center quickly spreads across the world at the click of a mouse. We can exchange dollars for Euros and most other currencies easily and quickly, but the rates at which we exchange our currency often change frequently and drastically.
- In short, tastes, production, competition, labor markets, and financial markets are rapidly globalizing, and this affects all of us deeply as consumers, workers, investors, and voters—yes, we live in a global economy.

The Subject Matter of International Economics

- International economics deals with the economic and financial interdependence among nations. It analyzes the flow of goods, services, payments, and monies between a nation and the rest of the world, the policies directed at regulating these flows, and their effect on the nation’s welfare. This economic and financial interdependence is affected by, and in turn influences, the political, social, cultural, and military relations among nations.

Specifically, international economics deals with:

- International trade theory
- International trade policy
- The balance of payments
- Foreign exchange markets, and
- open-economy macroeconomics.

- International trade theory analyzes the basis and the gains from trade.
- International trade policy examines the reasons for and the effects of trade restrictions.
- The balance of payments measures a nation’s total receipts from and the total payments to the rest of the world.
- The foreign exchange markets are the institutional framework for the exchange of one national currency for others.
- Finally, open-economy macroeconomics deals with the mechanisms of adjustment in balance-of-payments disequilibria (deficits and surpluses).

- More importantly, it analyzes the relationship between the internal and the external sectors of the economy of a nation, and how they are interrelated or interdependent with the rest of the world economy under different international monetary systems. International trade theory and policies are the microeconomic aspects of international economics because they deal with *individual* nations treated as single units and with the (relative) price of *individual* commodities.
- On the other hand, since the balance of payments deals with *total* receipts and payments, as well as with adjustment and other economic policies that affect the level of *national* income and the *general* price level of the nation as a whole, they represent the macroeconomic aspects of international economics. These are often referred to as open-economy macroeconomics or international finance.

Inter Regional (Internal) and International Trade

- Internal trade refers to the exchange of goods and services between two persons within a country. On the other hand, International trade refers to the exchange of goods and services between two or more countries.
- The intention behind every human economic activity is maximization of profit. Thus, one will concentrate in that activity which will give him maximum profit. This leads to division of labour and specialization. A country will concentrate on the production of goods and services for which it is most suited and exchange its own products with the output of other countries with mutual benefit.

According to Classical economists, differing labour productivity was the major promoter of international trade. According to recent economists, the source of trade has been difference in facto endowments. Thus the basis of internal and international trade is same. Another recent development has been to trade flows in terms of imperfectly competitive market. In short, international trade is necessitated by factors like difference in absolute advantage, comparative advantage, opportunity cost, facto endowments, factor intensity etc.

Internal and international trade does not make much difference. Both imply exchange of goods between persons. However, there are several differences between internal and international trade that necessitates the formulation of a separate theory of international trade. The main differences are as follows:

1. Factor Immobility:

- The classical economists advocated a separate theory of international trade on the ground that factors of production are freely mobile within each region as between places and occupations and immobile between countries entering into international trade. Thus, labour and capital are regarded as immobile between countries while they are perfectly mobile within a country.
- There is complete adjustment to wage differences and factor-price disparities within a country with quick and easy movement of labour and other factors from low return to high sectors. But no such movements are possible internationally. The reasons for international immobility of labour are—difference in languages, customs, occupational skills, unwillingness to leave familiar surroundings, and family ties, the high travelling expenses to the foreign country, and restrictions imposed by the foreign country on labour immigration.
- The international mobility of capital is restricted not by transport costs but by the difficulties of legal redress, political uncertainty, ignorance of the prospects of investment in a foreign country, imperfections of the banking system, instability of foreign currencies, mistrust of the foreigners, etc. Thus, widespread legal and other restrictions exist in the movement of labour and capital between countries. But such problems do not arise in the case of inter-regional trade.

2. Differences in Natural Resources:

- Different countries are endowed with different types of natural resources. Hence they tend to specialize in production of those commodities in which they are richly endowed and trade them with others where such resources are scarce. In Australia, land is in abundance but labour and capital are relatively scarce. On the contrary, capital is relatively abundant and cheap in England while land is scarce and dear there. Thus, commodities requiring more capital, such as manufactures, can be produced in England; while such commodities as wool, mutton, wheat, etc. requiring more land can be produced in Australia. Thus both countries can trade each other's commodities on the basis of comparative cost differences in the production of different commodities.

3. Geographical and Climatic Differences:

- Every country cannot produce all the commodities due to geographical and climatic conditions, except at possibly prohibitive costs. For instance, Brazil has favourable climate geographical conditions for the production of coffee; Bangladesh for jute; Cuba for beet sugar; etc. So countries having climatic and geographical advantages specialize in the production of particular commodities and trade them with others.

4. Different Markets:

- International markets are separated by difference in languages, usages, habits, tastes, fashions etc. Even the systems of weights and measures and pattern and styles in machinery and equipment differ from country to country. For instance, British railway engines and freight cars are basically different from those in France or in the United States. Thus goods which may be traded within regions may not be sold in other countries. That is why, in great many cases, products to be sold in foreign countries are especially designed to confirm to the national characteristics of that country. Similarly, in India right-hand driven cars are used whereas in Europe and America left-hand driven cars are used.

5. Mobility of Goods:

- There is also the difference in the mobility of goods between inter-regional and international markets. The mobility of goods within a country is restricted by only geographical distances and transportation costs. But there are many tariff and non-tariff barriers on the movement of goods between countries. Besides export and import duties, there are quotas, VES, exchange controls, export subsidies, dumping, etc. which restrict the mobility of goods at international plane.

6. Different Currencies:

- The principal difference between inter-regional and international trade lids in use of different currencies in foreign trade, but the same currency in domestic trade. Rupee is accepted throughout India from the North to the South and from the East to the West, but if we cross over to Nepal or Pakistan, we must convert our rupee into their rupee to buy goods and services there.
- It is not the differences in currencies alone that are important in international trade, but changes in their relative values. Every time a change occurs in the value of one currency in terms of another, a number of economic problems arise. "Calculation and execution of monetary exchange transactions incidental to international trading constitute costs and risks of a kind that are not ordinarily involved in domestic trade."
- Further, currencies of some countries like the American dollar, the British pound the Euro and Japanese yen, are more widely used in international transactions, while others are almost inconvertible. Such tendencies tend to create more economic problems at the international plane. Moreover, different countries follow different monetary and foreign exchange policies which affect the supply of exports or the demand for imports.

7. Problem of Balance of Payments:

- The problem of balance of payments is perpetual in international trade while regions within a country have no such problem. This is because there is greater mobility of capital within regions than between countries. Further, the policies which a country chooses to correct its disequilibrium in the balance of payments may give rise to a number of other problems. If it adopts deflation or devaluation or restrictions on imports or the movement of currency, they create further problems. But such problems do not arise in the case of inter-regional trade.

8. Different Transport Costs:

- Trade between countries involves high transport costs as against inter- regionally within a country because of geographical distances between different countries.

9. Different Economic Environment:

- Countries differ in their economic environment which affects their trade relations. The legal framework, institutional set-up, monetary, fiscal and commercial policies, factor endowments, production techniques, nature of products, etc. differ between countries. But there is no much difference in the economic environment within a country.

10. Different Political Groups:

- A significant distinction between inter-regional and international trade is that all regions within a country belong to one political unit while different countries have different political units. Inter-regional trade is among people belonging to the same country even though they may differ on the basis of castes, creeds, religions, tastes or customs. They have a sense of belonging to one nation and their loyalty to the region is secondary. The government is also interested more in the welfare of its nationals belonging to different regions. But in international trade there is no cohesion among nations and every country trades with other countries in its own interests and often to the detriment of others. As remarked by Friedrich List, “Domestic trade is among us, international trade is between us and them.”

11. Different National Policies:

- Another difference between inter-regional and international trade arises from the fact that policies relating to commerce, trade, taxation, etc. are the same within a country. But in international trade there are artificial barriers in the form of quotas, import duties, tariffs, exchange controls, etc. on the movement of goods and services from one country to another.

MERCANTILIST AND PHYSIOCRATES

MERCANTILISM

- Mercantilism (16-MID 18 CENTURIES)• The word comes from the Latin word mercari, which means “to run a trade”
- It was dominant in Europe from the 16th to the mid 18th century.
- It promoted governmental regulation of a nation's economy for the purpose of augmenting state power.
- Bullionism, was a term referred to the economic policies pursued by the mercantilists, such as governmental control over the use and exchange of precious metals.

- ADAM SMITH coined the term “mercantile system” to describe the system of political economy that sought to enrich the country by restraining imports and encouraging exports.
- Major regions affected by this thought were Portugal, France, Spain, and great Britain.
- Its use was favored by writers such as jean-Baptiste Colbert, who at that time serves as the French finance minister.

The Basic concept of Mercantilism in Terms of Trade:

- The approach assumes that the wealth of a nation depends primarily on the possession of previous metals such as gold and silver.
- By exporting goods, the countries could earn therefore maximize the amount of gold and silver.
- Conversely, importing goods from other countries resulted in an outflow of gold and silver to those countries thus reducing the government reserves.

Three main assumptions of Mercantilism:

- There is a finite amount of wealth in the world– trade is a zero sum game. A nation can grow rich only at the expense of another country.
- Wealth is measured by the amount of precious metals in the country.
- The goal is a positive trade balance – exports exceed imports.

Role of Government:

- This theory suggests that the government should play an active role in the economy by encouraging exports and discouraging imports, through the use of tariffs.
- A wide range of government subsidies on export industries to promote the country's export based policy.
- Prohibition of private accumulation , use and exports of gold and silver.
- One-way trade with colonies.

PHYSIOCRATES

- The Physiocrats were a group of economists who believed that the wealth of nations derived solely from agriculture.
- Their theories originated in France and were most popular during the second half of the 18^{th} century.
- Physiocracy was perhaps the first well developed theory of economics.
- The physiocrats saw the true wealth of a nation as determined by the surplus of agricultural production over and above that needed to support agriculture.
- The term physiocracy means “Rule of Nature’.

The Factors That Gave Rise to Physiocracy:

In 1750, France provided a favourable climate for the emergence of physiocratic ideas. There were many economic, political and social factors that were responsible for the rise of physiocracy:

- **Firstly**, physiocracy was essentially a revolt of the French against Mercantilism. Under Colbert the famous Finance Minister of France, Mercantilism was carried to an extreme degree. As a result, there was neglect of agriculture and lot of government regulations. So there was need for an economic theory to prove that the mercantile policies were not favourable for the progress and wealth of a nation. The Physiocrats provided the theoretical basis to attack Mercantilism.
- **Secondly**, the tax system of France was corrupt, inefficient and unjust. The nobles and the clergymen, who owned nearly 2/3rd of the lands, were exempted from direct taxation. On the other hand, the burden of taxation on the poor was very heavy. The poor were affected by taxes like salt tax, poll tax, etc.

- **Thirdly**, the finance of the French government was in a bad condition. The unnecessary wars and the luxurious court life of King Louis the XIV and XV made the government bankrupt. So the government started borrowing loans.
- **Fourthly**, the French farmers were exploited by the nobles and landlords in a number of ways. The landlords took large share of the produce. The government levied heavy taxes upon the farmers. Even the markets for agricultural commodities were restricted because Mercantilism was in favour of industrial goods.
- **Fifthly**, the general economic conditions of France were also unfavorable. Britain had already realised that it was a wrong policy to develop trade and industry at the expense of agriculture. Agricultural revolution was taking place in England. So in France also attention was diverted to agriculture.

- **Lastly**, there were other forces working for the change. The political and moral philosophers emphasised the importance of individual rather than wealth. They told that man must be the centre of study.

  Physiocrats are important in the history of economic thought because they represented the first school of economists. The mercantilists were ordinary people who emphasized only foreign trade. But the physiocrats realized the importance of various economic activities and their relation. In the physiocratic system all social factors like production and distribution are connected. In short, the physiocrats were reformers.

Terms of Trade – TOT

- Terms of trade (TOT) represent the ratio between the export prices of a country and the import prices. The ratio is calculated by dividing the price of the exports by the price of the imports and multiplying the result by 100. When a country's TOT is less than 100%, more capital is leaving the country than is entering the country. When the TOT is greater than 100%, the country is accumulating more capital from exports than it is spending on imports. It can be interpreted as the amount of import goods an economy can purchase per unit of export goods. An improvement of a nation's terms of trade benefits that country in the sense that it can buy more imports for any given level of exports.

Factors Affecting Terms of Trade

A variety of factors affect the TOT:

- The terms of trade may be influenced by **the exchange rate** because a rise in the value of a country's currency lowers the domestic prices of its imports but may not directly affect the prices of the commodities it exports.
- **Scarcity, or the amount of goods available for trade**, is one factor influencing the TOT. The greater the amount of goods available for sale, the more a vendor is likely to sell and the more goods that vendor can buy using capital obtained from sales. For example, during the commodity price boom of the early 2000s, developing countries experienced increases in their terms of trade. When selling a certain quantity of commodities, such as oil and copper, they could buy more consumer goods from other countries.
- **The size and quality of goods** are also factors that affect TOT. The larger the size of a good, or the higher the quality of the good, the more costly it is likely to be. If goods sell for a higher price, in turn, a seller can purchase a greater amount of goods.

Gains from Trade

- In economics, **gains from trade** are the net benefits to economic agents from being allowed an increase in voluntary trading with each other. In technical terms, they are the increase of consumer surplus plus producer surplus from lower tariffs or otherwise liberalizing trade.
- Classical economists maintain that there are two methods to measure the gains from trade: 1) international trade increases national income which helps us to get low priced imports; 2) gains are measured in terms of trade

Factors affecting Gains from Trade

There are several factors which determine the gains from international trade:

- Differences in cost ratio: The gains from international trade depends upon the cost ratios of differences in comparative cost ratios in the two trading countries. The smaller the difference between exchange rate and cost of production the smaller the gains from trade and vice versa.
- Demand and supply: If a country has elastic demand and supply gains the gains from trade are higher than if demand and supply are inelastic.
- Factor availability: International trade is based on the specialization and a country specializes depending upon the availability of factors of production. It will increase the domestic cost ratios and thereby the gains from trade.

- Size of country: If a country is small in size it is relatively easy for them to specialize in the production of one commodity and export the surplus production to a large country and can get more gains from international trade. Whereas if a country is large in size then they have to specialize in more than one good because the excess production of only one commodity cannot be exported fully to a small sized country as the demand for good will reduce very frequently.
- Terms of Trade: Gains from trade will depend upon the terms of trade. If the cost ratio and terms of trade are closer to each other more will be the gains from trade of the participating countries.
- Productive Efficiency: An increase in the productive efficiency of a country also determines its gains from trade as it lowers the cost of production and price of the goods.

Static and Dynamic gains from trade

. The two types of gains are: (1) Static Gains, and (2) Dynamic Gains.

Static Gains from Trade:

- The static gains from trade are measured by the increase in the utility or level of welfare when there is opening of trade between the countries. Static Gains means the increase in social welfare as a result of maximized national output due to optimum utilization of country's factor endowments or resources. Note that in modern economics increase in utility or welfare is measured through indifference curves. When as a result of foreign trade, a country moves from a lower indifference curve to a higher one, it implies that the welfare of the people has increased.

- **The following are the static gains from trade:**
- **1. Maximization of Production:**
- According to the classical economists, the gains from trade result from the advantages of division of labour and specialization both at the national and international levels. Given the resources and technology in a country, it is specialization in production on the basis of comparative advantage and trading which enables each country to exchange its goods for the goods of another country. Thus it reaps greater gain than without trade. Each country exports those goods which it produces cheaper in exchange for what other countries produce at a lower cost. According to Ricardo, “The gain from trade consisted in the saving of cost resulting from obtaining the imported goods through trade instead of domestic production.” Thus trade maximises production.
- **2. Increase in Welfare:**
- As a result of international division of labour and specialisation, the production of goods increases in the trading country. As a result, the consumption of goods increases and so does the welfare of the people. As pointed out by Ricardo, “The extension of international trade very powerfully contributes to increase the mass of commodities and, therefore, the sum of enjoyments.”

- **3. Increase in National Income:**
- When a country gains from international specialisation and exchange of goods in trade, there is increase in its national income. This, in turn, raises its level of output and growth rate of the economy.
- **4. Vent for Surplus:**
- The gain from trade also arises from the existence of idle land, labour, and other resources in a country before it enters into international trade. With its opening (vent) to world markets, its resources are used to produce a surplus of goods which would otherwise remain unsold. This is Adam Smith’s vent for surplus gain from trade.

Dynamic gains from trade

- Dynamic gains from trade relate to economic development of the economy. Specialization of the country for the production of best suited commodities which result in a large volume of quality production which promotes growth. Thus the extension of domestic market to foreign market will accelerate economic growth. Dynamic gains from trade, are those benefits which accelerate economic growth of the participating countries.

The following are the dynamic gains from trade:

1. Efficient Employment of Resources:

The direct dynamic gains from foreign trade are that comparative advantage leads to a more efficient employment of the productive resources of the world.

2. Widens-the Market:

The major indirect dynamic gain from trade is that it widens the size of the market. By enlarging the size of the market and scope of specialisation, international trade makes a greater use of machines, encourages inventions and innovations, raises labour productivity, lowers costs and leads to faster growth.

3. Development of Other Activities:

When a country starts producing goods for export and importing goods for domestic consumption, other economic activities also develop. There is expansion of infrastructure facilities in power, and building highways, bridges, fly-overs, etc. Shopping and housing complexes are built along with industrial centres. The primary sector develops into business sector for export of raw materials and for domestic use. Tertiary sector expands in the form of banks, communications, insurance, etc.

4. Increase in Investments:

Foreign trade encourages the setting up of new units for assembling and production of variety of goods. Supplementary and ancillary units are established. Production for exports leads to backward and forward linkages in developing other activities referred to above. All these increase autonomous and induced investments in the country.

Trade as an Engine of Growth

- During the nineteenth century, most of the world's modern industrial production was concentrated in Great Britain. Large increases in industrial production and population in resource-poor Britain led to a rapidly rising demand for the food and raw material exports of the regions of recent settlement (the United States, Canada, Australia, New Zealand, Argentina, Uruguay, and South Africa). For example, during the century from 1815 to 1913, Britain's population tripled, its real GNP increased 10 times, and the volume of its imports increased 20 times. The stimulus provided by their rapidly expanding exports then spread to the rest of the economy of these newly settled lands through the familiar accelerator-multiplier process. Thus, according to *Nurkse* (1970), the export sector was the leading sector that propelled these economies into rapid growth and development. That is, international trade functioned as an engine of growth for these nations during the nineteenth century.

- The regions of recent settlement were able to satisfy Britain's burgeoning demand for food and raw materials because of several favorable circumstances. First, these countries were richly endowed with natural resources such as fertile arable land, forests, and mineral deposits. Second, workers with various skills moved in great waves from overpopulated Europe to these mostly empty lands, and so did huge amounts of capital. Although data are far from precise, it seems that from 30 to 50 percent of total capital formation (i.e., investments) in such nations as Canada, Argentina, and Australia was financed through capital inflows. The huge inflows of capital and workers made possible the construction of railroads, canals, and other facilities that allowed the opening up of new supply sources of food and raw materials. Finally, the great improvement in sea transportation enabled these new lands to satisfy the rising demand for wheat, corn, cotton, wool, leather, and a variety of other foods and raw materials more cheaply than traditional sources of supply in Europe and elsewhere.

- Thus, all “ingredients” were present for rapid growth in these new lands: The demand for their products was rising rapidly; they had great and unexploited natural resources; and they received huge amounts of capital and millions of workers from Europe. To be sure, there are some economists, notably *Kravis*, who believe that the rapid growth of the regions of recent settlement during the nineteenth century was due primarily to very favorable internal conditions (such as abundant natural resources), with trade playing only an important *supportive* role. Be that as it may, it is generally agreed that today’s developing nations can rely much less on trade for their growth and development. This is due to less favorable demand and supply conditions.

- On the demand side, it is pointed out that the demand for food and raw materials is growing much less rapidly today than was the case for the regions of recent settlement during the nineteenth century. There are several reasons for this: (1) The income elasticity of demand in developed nations for many of the food and agricultural raw material exports of developing nations is less (and sometimes much less) than 1, so that as income rises in developed nations, their demand for the agricultural exports of developing nations increases proportionately less than the increase in income. For example, the income elasticity of demand for coffee is about 0.8, for cocoa 0.5, for sugar 0.4, and for tea 0.1. (2) The development of synthetic substitutes has reduced the demand for natural raw materials; for example, synthetic rubber has reduced the demand for natural rubber, nylon the demand for cotton, and plastics the demand for hides and skins. (3) Technological advances have reduced the raw material content of many products, such as tin-plated cans and microcircuits. (4) The output of services (with lower raw material requirements than commodities) has grown faster than the output of commodities in developed nations. (5) Developed nations have imposed trade restrictions on many temperate exports (such as wheat, vegetables, sugar, oils, and other products) of developing nations.
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- On the supply side, *Cairncross* (1962) has pointed out that most of today's developing nations are much less well endowed with natural resources (except for petroleum-exporting nations) than were the regions of recent settlement during the nineteenth century. In addition, most of today's developing nations are over-populated, so that most of any increase in their output of food and raw materials is absorbed domestically rather than exported. Furthermore, the international flow of capital to most developing nations today is relatively much less than it was for the regions of recent settlement in the nineteenth century, and today's developing nations seem also to face an outflow of skilled labor rather than an inflow. Finally, it is also true that until the 1990s, developing nations have somewhat neglected their agriculture in favor of more rapid industrialization, thereby hampering their export (and development) prospects.

Foreign Trade Multiplier

Meaning:

- The foreign trade multiplier, also known as the export multiplier, operates like the investment multiplier of Keynes. It may be defined as the amount by which the national income of a country will be raised by a unit increase in domestic investment on exports.
- As exports increase, there is an increase in the income of all persons associated with export industries. These, in turn, create demand for goods. But this is dependent upon their marginal propensity to save (MPS) and the marginal propensity to import (MPM). The smaller these two marginal propensities are, the larger will be the value of the multiplier, and vice versa.

- **The foreign trade multiplier can be derived algebraically as follows:**
- The national income identity in an open economy is
- Y = C + I + X – M
- Where Y is national income, C is national consumption, I is total investment, X is exports and M is imports.
- **The above relationship can be solved as:**
- Y-C = 1 + X-M
- or S = I+X-M (S=Y-C)
- S + M = I + X
- Thus at equilibrium levels of income the sum of savings and imports (S+M) must equal the sum of investment and export (1+X).

- In an open economy the investment component (I) is divided into domestic investment (I_d) and foreign investment (I_f)
- I=S
- $I_d + I_f = S$… (1)
- Foreign investment (I_f) is the difference between exports and imports of goods and services.
- $I_f = X-M$…. (2)
- Substituting (2) into (1), we have
- $I_d + X-M – S$
- or $I_d + X = S+M$
- Which is the equilibrium condition of national income in an open economy. The foreign trade multiplier coefficient (K_f) is equal to
- $K_f = \Delta Y/\Delta X$
- And $\Delta X = \Delta S + \Delta M$

And $\Delta X = \Delta S + \Delta M$

Dividing both sides by ΔY, we get

$$\frac{\Delta X}{\Delta Y} = \frac{\Delta S + \Delta M}{\Delta Y}$$

or
$$\frac{\Delta Y}{\Delta X} = \frac{\Delta Y}{\Delta S + \Delta M}$$

or
$$K_f = \frac{\Delta Y}{\Delta S + \Delta M} \qquad \left(\because K_f = \frac{\Delta Y}{\Delta X}\right)$$

$$K_f = \frac{1}{\frac{\Delta S}{\Delta Y} + \frac{\Delta M}{\Delta Y}} \qquad (\because \text{Dividing by } \Delta Y)$$

Hence
$$K_f = \frac{1}{MPS + MPM} \qquad \left(\begin{array}{l}\because MPS = \Delta S / \Delta Y \\ \because MPM = \Delta M / \Delta Y\end{array}\right)$$

Let us understand it with the help of an example.
Suppose $MPS = 0.3$, $MPM = 0.2$ and ΔX (increase in exports) = Rs. 1000 crores, we get

$$K_f = \frac{\Delta Y}{\Delta X} = \frac{1}{MPS + MPM}$$

or
$$\Delta Y = \frac{1}{MPS + MPM} \Delta X$$

$$= \frac{1}{0.3 + 0.2} \times 1000 = \text{Rs. } 2000 \text{ crores}$$

- It shows that an increase in exports by Rs. 1000 crores has raised national income through the foreign trade multiplier by Rs. 2000 crores, given the values of MPS and MPM.

It's Assumptions:

The foreign trade multiplier is based on the following assumptions:

1. There is full employment in the domestic economy.
2. There is direct link between domestic and foreign country in exporting and importing goods.
3. The country is small with no foreign repercussion effects.
4. It is on a fixed exchange rate system.
5. The multiplier is based on instantaneous process without time lags.
6. There is no accelerator.
7. There are no tariff barriers and exchange controls.
8. Domestic investment (I_d) remains constant.
9. Government expenditure is constant.
10. The analysis is applicable to only two countries.

Diagrammatic Explanation:

- Given these assumptions, the equilibrium level in the economy is shown in Figure 1, where S(Y) is the saving function and (S+M) Y is the saving plus import function. I_d represents domestic investment and I_d + X, domestic investment plus exports. (S+M) Y and I_d+ X functions determine the equilibrium level of national income OY at

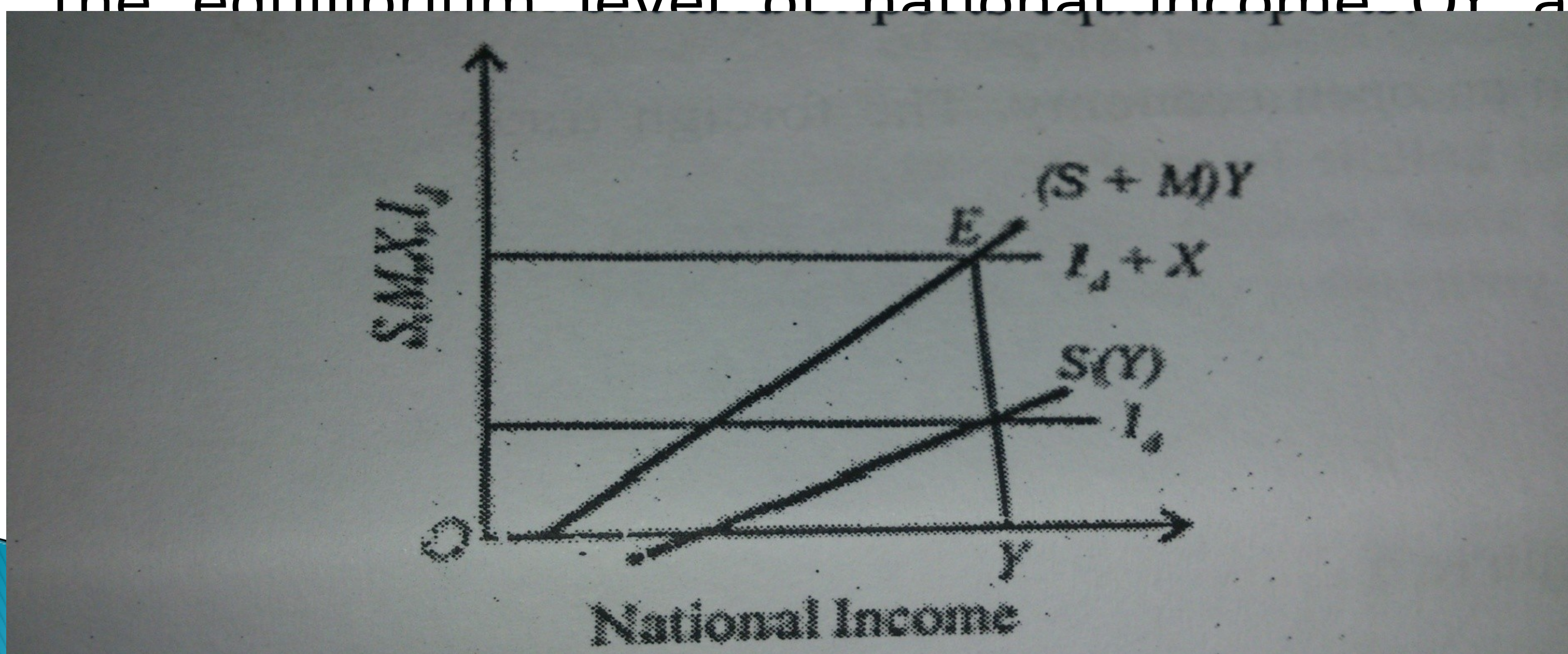


Fig. 1

- If there is a shift in the I_d + X function due to an increase in exports, the national income will increase from OY to OY_1 as shown in Figure 2. This increase in income is due to the multiplier effect, i.e. $\Delta Y = K_f \, \Delta X$. The exports will exceed imports by sd, the amount by which savings will exceed

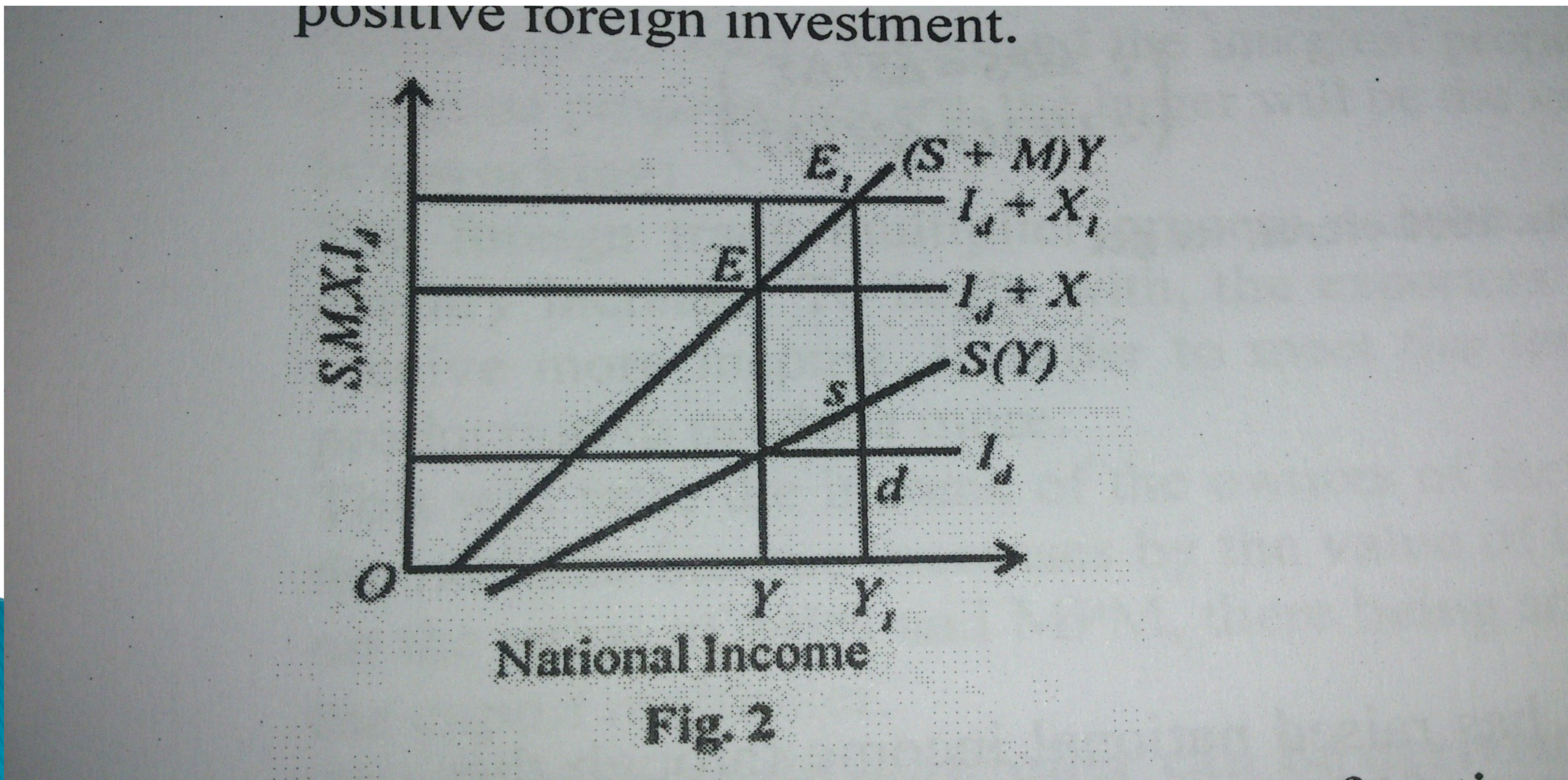
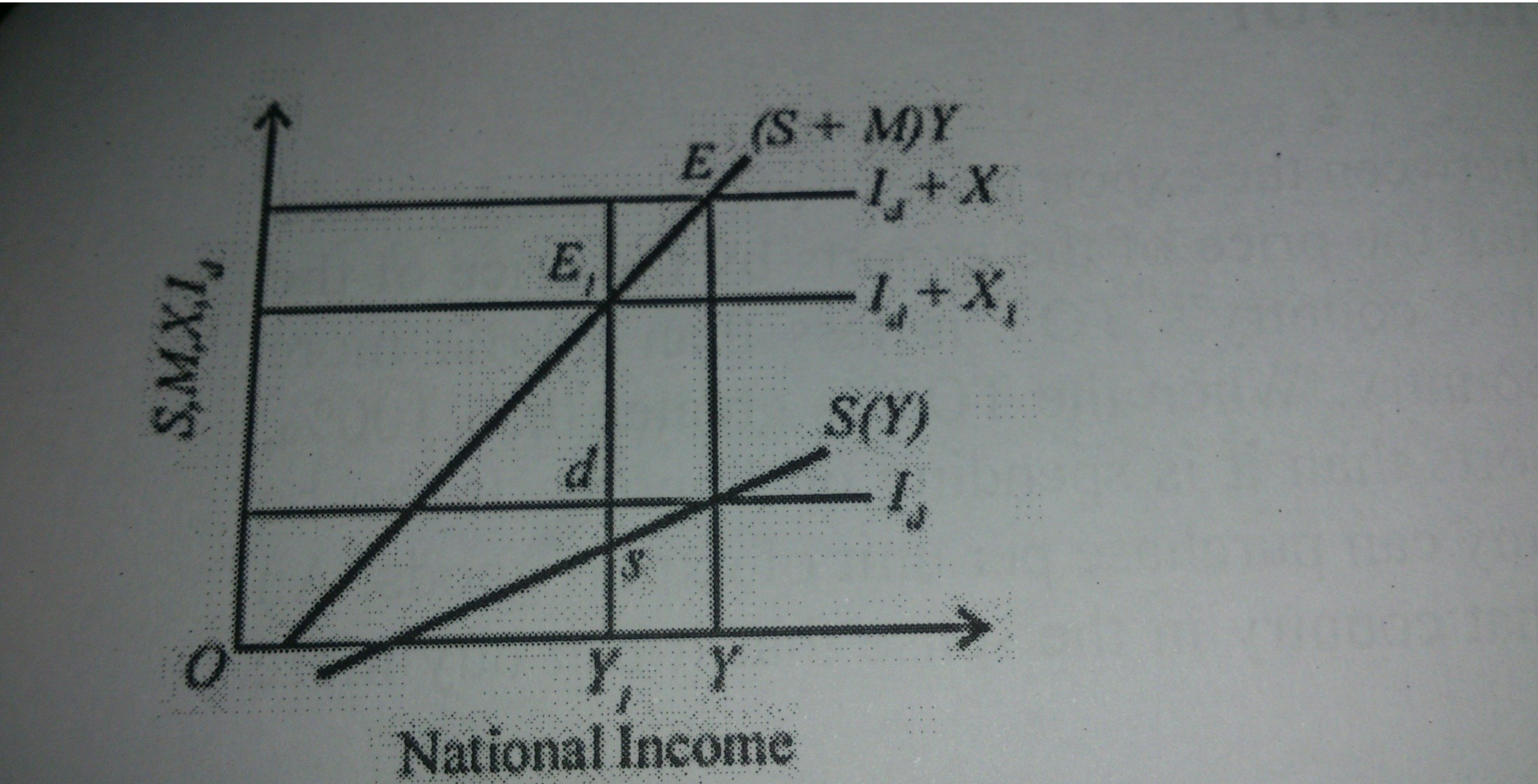


Fig. 2

- If there is a fall in exports, the export function will shift downward to $I_d + X_1$ as shown in Figure 3. In this case imports would exceed exports and domestic investment would exceed savings by ds. The level of national income is reduced from OY



Balance of Payments

- The balance of payments of a country is a systematic record of all its economic transactions with the outside world in a given year. It is a statistical record of the character and dimensions of the country's economic relationships with the rest of the world.
- According to Bo Sodersten, "The balance of payments is merely a way of listing receipts and payments in international transactions for a country."

Structure and Classification:

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

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

- These credit and debit items are shown vertically in the balance of payments account of a country according to the principle of double-entry book-keeping. Horizontally, they are divided into three categories: the current account, the capital account and the official settlements account or the official reserve assets account.
- The balance of payments account of a country is constructed in below Table.

Table 10. Balance of Payments Account

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

1. Current Account:

- The current account of a country consists of all transactions relating to trade in goods and services and unilateral (or unrequited) transfers. Service transactions include costs of travel and transportation, insurance, income and payments of foreign investments, etc. Transfer payments relate to gifts, foreign aid, pensions, private remittances, charitable donations, etc. received from foreign individuals and governments to foreigners.
- In the current account, merchandise exports and imports are the most important items. Exports are shown as a positive item and are calculated f.o.b. (free on board) which means that costs of transportation, insurance, etc. are excluded. On the other side, imports are shown as a negative item and are calculated c.i.f. which means costs, insurance and freight are included.
- The difference between exports and imports of a country is its balance of visible trade or merchandise trade or simply **balance of trade**. If visible exports exceed visible imports, the balance of trade is favourable. In the opposite case when imports exceed exports, it is unfavourable.

- It is, however, services and transfer payments or invisible items of the current account that reflect the true picture of the balance of payments account. The balance of exports and imports of services and transfer payments is called the **balance of invisible trade**.
- The invisible items along with the visible items determine the actual current account position. If exports of goods and services exceed imports of goods and services, the balance of payments is said to be favourable. In the opposite case, it is unfavourable.
- In the current account, the exports of goods and services and the receipts of transfer payments (unrequited receipts) are entered as credits (+) because they represent receipts from foreigners. On the other hand, the imports of goods and services and grant of transfer payments to foreigners are entered as debits (-) because they represent payments to foreigners. The net value of these visible and invisible trade balances is the balance on current account.

2. Capital Account:

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

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

Basic Balance:

- The sum of current account and capital account is known as the **basic balance**.

3. The Official Settlements Account:

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

Errors and Omissions:

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

Is Balance of Payments Always in Equilibrium?

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

Balance of payments is written as:

$B = R_f P_f$

Where, B represents balance of payments,

R_f receipts from foreigners,

P_f payments made of foreigners

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

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

Measuring Deficit or Surplus in Balance of Payments:

- If the balance of payments always balances, then why does a deficit or surplus arise in the balance of payment of a country? It is only when all items in the balance of payments are included that there is no possibility of a deficit or surplus. But if some items are excluded from a country's balance of payments and then a balance is struck, it may show a deficit or surplus.
- There are three ways of measuring deficit or surplus in the balance of payments. First, there is the basic balance which includes the current account balance and the long-term capital account balance.
- Second, there is the net liquidity balance which includes the basic balance and the short-term private non-liquid capital balance, allocation of SDRs, and errors and omissions.
- Third, there is the official settlements balance which includes the total net liquid balance and short-term private liquid capital balance.

- If the total debits are more than total credits in the current and capital accounts, including errors and omissions, the net debit balance measures the deficit in the balance of payments of a country. This deficit can be settled with an equal amount of net credit balance in the official settlements account.
- On the contrary, if total credits are more than total debits in the current and capital accounts, including errors and omissions, the net debit balance measures the surplus in the balance of payments of a country. This surplus can be settled with an equal amount of net debit balance in the official settlements account.

Disequilibrium in Balance of Payments

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

Causes of Disequilibrium:

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

1. Temporary Changes (or Disequilibrium):

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

2. Fundamental Disequilibrium:

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

3. Structural Changes (or Disequilibrium):

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

They may result from the following factors:

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

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

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

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

4. Changes in Exchange Rates:

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

5. Cyclical Fluctuations (or Disequilibrium):

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

6. Changes in National Income:

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

7. Price Changes:

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

8. Stage of Economic Development:

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

9. Capital Movements:

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

10. Political Conditions:

- Political condition of a country is another cause of disequilibrium in BOP. Political instability in a country creates uncertainty among foreign investors which leads to the outflow of capital and retards its inflow. This causes disequilibrium in BOP of the country. Disequilibrium in BOP also occurs in the event of war or fear of war with some other country.

Measures to Correct Deficit in Balance of Payments

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

1. Adjustment through Exchange Depreciation (Price Effect):

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

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

2. Devaluation or Expenditure-Switching Policy:

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

3. Direct Controls:

- To correct disequilibrium in the balance of payments, government also adopts direct controls which aim at limiting the volume of imports. The government restricts the import of undesirable or unimportant items by levying heavy import duties, fixation of quotas, etc. At the same time, it may allow Imports of essential goods duty free or at lower import duties, or fix liberal import quotas for them.
- For instance the government may allow free entry of capital goods, but impose heavy import duties on luxuries.' Import quotas are also fixed and the importers are required to take licenses from the authorities in order to import certain essential commodities in fixed quantities.
- In these ways, imports are reduced in order to correct an adverse balance of payments. The government also imposes exchange controls. Exchange controls have a dual purpose. They restrict imports and also control and regulate the foreign exchange. With reduction in imports and control of foreign exchange, visible and invisible imports are reduced. Consequently, an adverse balance of payment is corrected.

4. Adjustment through Capital Movements

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

5. Adjustment through Income Changes:

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

6. Stimulation of Exports and Import Substitutes:

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

7. Expenditure-Reducing policies:

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