# *INDUSTRIAL ENGINEERING & MANAGEMENT*

## *Module 5*

## *International Trade*

# INTERNATIONAL TRADE

We divide trade in to two types-internal as well as international trade. Internal trade means exchange of goods and services within different regions of a country. Contrary to this, international trade refers to the exchange of goods and services between two or more countries.

According to Penguin Dictionary "the exchange of goods and services between one country and another is called international trade".

According to Anatol Murad, " international trade is a trade between nations".

## Basis of International Trade

The following are the main basis of international trade;

- **International Specialization** : The foremost cause of international trade is international specialization. It means that different countries of the world specialize in the production of those goods in whose production they possess special resources.
- **Non- availability of Specific Factor :** Every country does not possess all kinds of resources. Some factors may be available in some countries while other countries may be in possession of other factors. Therefore, non-availability of some specific factors in a particular country needs to have international trade.

# INTERNATIONAL TRADE

- **Difference in Costs** : Another important cause of international trade is the difference in costs of different goods in different countries.
- **Comparative Cost Difference** : It means that a country can produce all goods at a lower cost than the other country, yet the cost of producing some goods is comparatively less than all other goods.
- **Product Differentiation** : Sometimes it is seen that a country does import a commodity that she herself can produce. For instance, India produces cloth on a large scale and also exports it, never the less she imports different varieties of cloth. It is done to enable the people to consume large varieties of goods.

# *Advantages of international trade*

*The following are the important advantages of foreign trade.*

1. *Optimal use of natural resources: International trade helps each country to make optimum use of its natural resources. Each country can concentrate on production of those goods which are advantageous to them. Therefore, wastage of resources is avoided.*
2. *Availability of all types of goods: It enables a country to obtain goods produced all over the world.*
3. *Advantages of large-scale production: Due to international trade, goods can be produced for home consumption as well as for export. This enables country to produce in large scale and enjoy the benefits of largescale production.*

# *Advantages of international trade*

## *4. Stability in prices:*

*International trade helps to avoid wild fluctuations in prices by making the goods freely available all over the world.*

## *5. Establishment of new industries:*

*The importing of machinery and technology enable the country to start new industries.*

## *6. Increase in efficiency:*

*Due to international competition, the producers in a country attempt to produce better quality goods and to minimize the cost. This increases efficiency and productivity.*

## *Advantages of international trade*

*7. Better Employment opportunities:*

*As the foreign trade expands, it creates jobs and provides better employment opportunities for the people both in and outside the country.*

*8. International co-operation and understanding:*

*The people of different countries come in contact with each other. Commercial integration amongst nations of the world encourages exchange of ideas and culture. It creates cooperation, understanding, and cordial relations among various nations.*

# Disadvantages of International trade

1. A threat to domestic industries: International trade has an adverse effect on the development of home industries. It poses a threat to the survival of infant industries at home.
2. Economic dependence: Underdeveloped nations have to rely on developed countries for their economic growth. Such dependency often results in economic exploitation.
3. Misuse of natural resources: Constant and excessive exports can exhaust the natural resources in a country.
4. Endangers independence: Foreign trade encourages slavery. It impairs the economic independence of the poor nations.

## Disadvantages

5. Import of harmful goods: Through international trade harmful goods may be imported and it may adversely affects health and well being of the people.

# Commercial Policy / Foreign Trade Policy

Commercial Policy of a country may be either Free Trade or Protection.

**FREE TRADE**

A free trade policy is one which does not impose any restriction on the exchange of goods and services between different countries. Thus, a free trade policy permits international flow of goods and services without any artificial impediments. In other words, a free trade policy is necessarily a non-discriminatory trade policy.

According to Prof. Jagdish Bhagawati, free trade is the complete "absence of tariffs , quotas, exchange restrictions, taxes and subsidies on production factor use, and consumption.

# Case for Free Trade

- Maximization of Total Output : Free trade enables countries to specialize in the production of those commodities in which they have a comparative advantage. International trade increases the size of a firm's market, resulting in lower average costs and increased productivity, ultimately leading to increased production.
- Optimum Use of Resources : Under free trade, there is little possibility of underutilization or wastage of scarce resources. Any scarcity of productive factors, can be easily off-set through their import from foreign countries. Thus, free trade paves the way for the optimization of productive factors through-out the world.

# Case for Free Trade

Larger Factor Incomes : In the condition of free trade, the factor units can easily and quickly move either within the same country or between different countries for securing larger remuneration for their services. It is , therefore, possible that factor incomes such as wages, rent, interest and profits are higher under free trade than otherwise.

Optimization of Consumption: The free international trade enables a country to import products from the cheapest market and relieve the domestic shortages of goods. The increased availability of consumable goods of better varieties at low prices assures the optimization of consumption in the trading countries.

# Case for Free Trade

Prevents Monopolies : Free trade implies free competition. The producers from different countries try to expand their sales in the markets of other countries. The price competition and introduction of newer varieties of products prevent the emergence of exploitative monopolies.

Develops Transport and Communications : Free trade encourages the development of the means of transport and communications not only within countries but also among countries. Rail, Road, Sea, and air transport systems expand with better and more cargo facilities which move safely and quickly globally.

# FREE TRADE

- Educative Effects : According to Haberler, free trade has an educative value. International competition encourages home producers to sacrifice leisure in order to increase productivity. For this, they innovate and bring improvements in organization and methods of production.
- Higher Economic Growth : Free trade helps to accelerate the rate of economic development of underdeveloped nations. These countries can easily import, capital goods, machinery, essential raw material and technical know-how for their economic development through free trade.
- Promotes International Co-operation : Free trade leads to interdependence on the part of different countries for the exchange of specific types of commodities.

## Case Against Free Trade

The following are the arguments against free trade.

- One - Sided Development : Under the policy of free trade, some industries expand in which the country possess comparative advantage but other industries are not developed. One type of industries may be developed while others may remain undeveloped. This naturally leads to the one-sided development of the economy.
- Curtailing Social Welfare : Under free trade there are no restrictions on the movement of goods. In this case sub-standard and harmful goods are to be produced. This will curtail social welfare.
- Economic Dependence : Free trade leads to economic dependence which is harmful for a backward country. Such a country has to depend on the imports of varied types of consumers and capital goods, raw materials etc..

## Case Against Free Trade

- Import of Harmful Products : Countries cannot allow free import of injurious and harmful products; hence trade restrictions become necessary.
- Exploitation of Poor Countries : Under free trade system, the poor countries suffer when they compete with rich countries. The technology of advanced nations are much more superior, so they can afford to sell their products to under developed nations at lower rates. This will adversely affect the industries in poor nations.
- Protect Infant Industries : Backward countries have to protect their infant industries and hence cannot adopt the policy of free trade.

# PROTECTION

- Protection refers to the foreign trade policy of encouraging home industries by paying bounties (or giving subsidies) to domestic producers or more usually by imposing customs duties on foreign products.
- In other words, the term protection refers to a policy where by domestic industries are to be protected from foreign competition.
- According to Harry G. Johnson, the term protection refers to those “policies that create a divergence between the relative prices of commodities to domestic consumers and producers and their relative prices in world markets”.

# PROTECTION

On the other hand, protection refers to a commercial policy directed to protect home industries from foreign competition.

Tariff system (i.e., customs duty) is an important and most common method of protection. By tariff barriers we mean only those taxes which are intended to restrict international trade.

# Arguments for Protection

The Revenue Arguments : The main objective of giving protection to the home industry by imposing import duties is to earn revenue because only foreigners pay tax.

Protection Saves Jobs : The use of tariffs discourages imports and raises their prices to the domestic consumers. This leads to diversion of demand for goods produced at home. The home industry is encouraged and thus more employment is provided for the home population.

To Check the Import of Luxuries and Harmful Goods: Another argument is advanced in favour of protection is that it checks the import of many harmful and luxury goods. Their import adversely affects the character of the people. In order to escape from the harmful effect of these goods, protection is quite helpful.

## Arguments for Protection

- Protection Safeguards National Security : In times of war or any other emergency, dependence on foreign goods, which are very essential, may not be available. Therefore, a country must build up its own industry and develop farming industry even if these involve an economic loss to the country.
- Protection for Conserving Natural Resources : Protection is essential for preserving the natural resources of a country. The unchecked trade often leads to exhaustion of mineral resources which are very vital for the development of the country.
- Protectionism Promotes "Keep Money at Home" : When domestic residents buy imported goods, the country gets the goods and the foreigners get the money. On the other hand, when the residents buy domestic goods, the country keeps both the goods and the money. Hence, the country gets richer by preventing imports.

- <u>Balance of Trade Argument</u> : It is believed that favourable balance should be maintained in order to correct the disequilibrium in the balance of payments, of a country. Suitable tariff policy must be framed to achieve this surplus.
- <u>Anti-Dumping Measures Argument</u> : Protection is also advocated as an anti-dumping measure. A foreign country may resort to dumping with a view to capturing markets in another country. Thus, a high tariff may become necessary in order to protect home producers against dumping of foreign goods, on the home market.

# Arguments against Protection

The important argument  against protection are enlisted below;

- Home Producers become Lazy: With the policy of protection home producers become lazy because they do not bother about improvements in the industry.
- Creation of Monopolies: In the absence of competition, domestic manufacturers combine themselves and earn high profit. As a consequence, there is concentration of economic powers and monopolistic practices.

## Arguments against Protection

- Danger of Corruption: Another argument against protection is that it gives birth to corruption. The protected industries apply their energies and money to bribe the administrative machinery for certain benefits instead of focusing their attention for improvement of their business.
- Fall in Foreign Trade : Under the policy of protection imports are either restricted or burdened with high import duty. Consequently , imports fall. With fall in imports, there is also fall in exports. Thus, protection causes fall in foreign trade.

## Arguments against Protection

- Ignores the Comparative Cost Theory : According to some critics, under the policy of protection, every country seeks to produce all sorts of goods and not only those which enjoy greater comparative advantage. Thus policy of protection ignores the comparative cost theory.

# Trade Barriers

- **Trade barriers** refer to the Government policies and measures which restrict the free flow of goods between the countries. Broadly, trade barriers are divided in to two groups. They are;

**a) Tariff barriers** and **b) Non-tariff barriers.**

## Tariff barriers

- ***Tariff barriers are duties or taxes imposed by the Government of a country on its imports or exports.*** Tariff is an important measure of protection.

***On the basis of origin and destination of goods, tariffs can be classified in to the following three categories***

i. *Export duties:* These are taxes levied on goods originated in the duty levying country (home country) and destined for some other countries.

ii. *Import duties:* These are taxes imposed on goods originated abroad and destined for the duty levying country(home country).

iii. *Transit duty:* These are taxes imposed on goods crossing the boarders of a country but these goods are originated from and destined for some other countries.

*Based on the quantification of tariffs, these can be classified as*

i. *Specific duties:* It is a fixed amount of duty imposed on each unit of the commodity exported or imported.
ii. *Ad-valorem duties:* These are duties levied as a fixed percentage of the value of the commodity imported or exported.
iii. *Compound duties:* When specific and ad-valorem duties are imposed on a commodity it is known as compound duties.

*Based on the purpose they serve, tariffs can be classified as*

i. *Revenue Tariff:* When raising revenue is the only motive of imposing a tariff, it is called revenue tariff. Generally, this type of tariff rates will be low.

ii. *Protective Tariff:* This type of tariff is imposed with an intention to protect domestic industries. Usually, the rates will be high.

iii. *Countervailing and Anti-Dumping tariffs:* Countervailing tariffs are imposed on those commodities which are heavily subsidised by the foreign governments. When foreign goods are sold in the domestic market at price lower than its cost of production, anti-dumping duties are imposed.

## *Effects of Tariff*

i. *Protective effect:* When an import duty is imposed, imports become costlier. Hence, the demand for domestic goods will increase and it will protect the domestic industries.

ii. *Revenue effect:* A tariff will increase the revenue of the Government if it does not completely stops the imports.

iii. *Income and employment:* A tariff will increase the demand for domestic goods. Hence it will increase production, employment, and income in the home country.

## ***Effects of Tariff***

*iv. Balance of Payments effect:* Tariff may help to improve the balance of payments as its restrict the imports.

*v. Consumption effect:* An import duty will increase the price of the commodities and hence it will reduce the buying capacity of the people.

*vi. Competitive effect:* An import duty protects the domestic industries and hence it may reduce competition in the economy. This can lead to inefficiencies.

## Non-Tariff Barriers

- A non-tariff barrier is a way to restrict trade using trade barriers in a form other than a tariff.
- Countries use non-tariff barriers to protect local industries against foreign competition.
- Nontariff barriers include quotas, embargoes, sanctions, and levies.

**i) *Quotas :*** *Quotas are quantitative restrictions that are imposed on imports and exports of a specific product for a specified period. With quotas, countries agree on specified limits for products and services allowed for importation to a country.*

## Non-Tariff Barriers

ii) ***Licenses***: *Licenses are one of the most common instruments that countries use to regulate the import of goods. A license system allows authorized companies to import specific commodities that are included in the list of licensed goods.*

**iii) *Embargoes*:** *Embargoes are when a country–or several countries–officially ban the trade of specified goods and services with another country. Governments may take this measure to support their specific political or economic goals.*

# Non-Tariff Barriers

***iv) Voluntary Export Restraints:*** *Exporting countries sometimes use voluntary export restraints. Voluntary export restraints set limits on the number of goods and services a country can export to specified countries. These restraints are typically based on availability and political alliances.*

***v) Sanctions:*** *Countries impose sanctions on other countries to limit their trade activity. Sanctions can include increased administrative actions–or additional customs and trade procedures–that slow or limit a country's ability to trade.*

# ***Balance of Payments***

- *Balance of payments is a systematic record of all economic transactions of a nation with the rest of the world for a specific period of time.*
- The main purpose of balance of payments is to inform the Governments regarding the international currency position of the nation and to help in the formulation of policies accordingly.

## *Features of Balance of Payments*

Main features of balance of payments are as follows;

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

(ii) It includes all transactions, visible as well as invisible.

(iii) It relates to a period of time. Generally it is an annual statement.

(iv) It adopts a double-entry book keeping system. It has two sides; credit side and debit side. Receipts are recorded on the credit side and payments on the debit side.

(v) When receipts are equal to payments, the balance of payments is in equilibrium; when receipts are greater than payments, there is surplus in the balance of payments; when payments are greater than receipts, there is deficit in the BOPs.

(vi) In the accounting sense , total credits and debits in the balance of payments statement always balance each other.

# *Balance of trade and Balance of Payments*

- *Balance of trade includes only those transactions which are involved in the exporting and importing of visible items (goods). It does not include invisible items such as various kinds of services (shipping, banking, insurance), payment of interest and dividend etc.*

- *On the other hand, balance of payments includes both visible and invisible item.*

## *Difference between BOT and BOP*

- BOT includes only imports and exports of visible goods, but BOP includes both visible and invisible transactions
- BOT account may be a surplus or deficit. But BOP is always balanced.(ie, total receipts must be equal to total payments.)
- BOT account is a part of the current account of the balance of payment. But BOP account considers both current and capital accounts.

## *Components of Balance of Payments*

*Balance of payments accounting follows double-entry book-keeping system. That means each transaction will result in a credit entry and debit entry of equal size. Therefore, balance of payments will always balance.*

*That is, total amount of debit will be equal to total amount of credit.*

*Usually, international transactions are classified under the following heads.*

1. *Current Account*     2. *Capital Account*
3. *Unilateral payments Account*
4. *Official Reserve Assets Account*

# *1. Current Account*

Current Account consists of two major items

## i) Merchandise (visible) exports and imports:

Merchandise exports, that is sale of goods abroad are credit items and merchandise imports, that is purchase of goods from abroad are debit items. Merchandise exports and imports are the most important international transactions of most of the countries.

## ii) Invisible exports and imports:

Invisible exports are credit entries and invisible imports are debit entries. Invisible exports mean sale of services like transport, insurance, foreign tourist expenditure in the home country, and interest received on loan and dividend on investment abroad etc.

Invisible imports include purchase of services like transport and insurance, tourist expenditure abroad and payment on foreign loans and foreign investments etc.

## 2. Capital Account

The capital account includes short term and long term capital transactions. Capital inflows are coming as credit entries and capital outflows as debit entries. For example, when a Japanese firm invest 100 million in India, there will be an entry under credit for India and an entry under debit for Japan.

The capital account involves inflows and outflows relating to investments, short term, and medium term to long term borrowings/lending.

There can be surplus or deficit in capital account. The surplus will take place when the credits are more than debits and the deficit will take place when the debits are more than credits.

## 3. Unilateral Transfers Account

Unilateral Transfer means the one-way transfer of an item from one person to another. Such one-way transfers are without any expectations of anything in return. This is an important item of balance of payments. In a broader sense it is a part of current account. The following are the important items coming under unilateral transfers.

- Payments or remittances from immigrants to their home country.
- Humanitarian aid.
- Aid by one country to another. Usually, the aid is from developed or prosperous nations to less developed nations.
- Contribution to charitable institutions.
- Membership payment to international agencies.
- Gift from one county to another. This gift could be from a person, business or government.

## 4. Official Reserve Account

The official reserve account is a subdivision of the capital account. It is the foreign currency and securities held by the government, usually by its central bank, and is used to balance the payments from year to year. The official reserves increases when there is a trade surplus and decreases when there is a deficit. Sometimes the central bank will use it to intervene in the foreign exchange market to set the exchange rate to some desired level.

## Balance of Payments Disequilibrium – Deficit

The balance of payments is in disequilibrium when it shows a surplus or deficit. When the demand for foreign exchange exceeds the supply of foreign exchange, there is deficit in balance of payments. There are a number factors responsible for a disequilibrium or a deficit in balance of payments.

## 1. Economic Factors

The following are the important economic factors which lead to balance of payment disequilibrium.

**i) Development disequilibrium**: Largescale development expenditure may increase the purchasing power of the people and they demand more imported items. Besides, developing countries may import capital goods like machinery and equipment for their economic development. This also increase their import bill and result in a deficit.

**ii) Cyclical Disequilibrium:** Cyclical fluctuation create and boom and depression. When there is boom import may increase more than export and it create a deficit in balance of payments.

**iii) Secular Disequilibrium:** In developed countries disposable income and aggregate demand will be very high. Wages may increase and the production cost also increases. This may result in high prices. Higher aggregate demand and higher prices lead to larger imports and deficit in the balance of payments.

## 2. Political Factors

Political instability in a country may adversely affect the capital flows and investments. It may lead to large capital outflows and less investment in the domestic country. This may create a deficit in balance of payments.

## 3. Social Factors

Changes in tastes, fashion etc. may change consumption habits of the people and this may affect export and import as well as balance of payments.

# Correction of Disequilibrium or Deficit

When there is deficit in the balance of payments, it has to be corrected. The following are the important measures to correct balance of payments disequilibrium.

**1. Automatic Correction:** When there is a disequilibrium in the balance of payments, the economy will try to correct it automatically with the help of demand supply mechanism. For example, when there is a deficit, or the demand for foreign exchange exceeds it supply, the exchange rate will be get adjusted accordingly and there will be a fall in the external value of the domestic currency. This will increase the exports and correct the deficit.

## 2. Deliberate Measures

The three deliberate measures are a) **Monetary measures** b) **Trade measures and** c) **Miscellaneous measures**

a) **Monetary measures:** The important monetary measures are

**i) <u>Monetary contraction or expansion:</u>** Expansion or contraction of money supply can affect the balance of payments position. When there is a deficit, a contraction of money supply will decrease the purchasing power of the people and hence the aggregate demand as well as the price level falls. This reduces the imports.

When there is a fall in the price in the domestic economy, it encourages export. Thus, deficit will be corrected.

ii) **Devaluation :** Devaluation means a deliberate reduction of the value of the domestic currency in terms of foreign currencies. When there is a deficit in the balance of payments, devaluation of the currency encourages export and discourages import. Devaluation makes the domestic goods cheaper for the foreigners and foreign goods expensive for the people in the home country.

iii) **Exchange control:** Under exchange control, the Government or the central bank will have the complete control over the foreign exchange earning of the country. The Government will keep the entire foreign exchange earnings and this helps the Government to control imports.

**b) Trade Measures :** Trade measures are i) **export promotion** and **ii) import control.**

i) **Export promotion:** Export can be encouraged by abolishing export duty, giving export subsidy and by providing facilities for export-oriented production.

ii) **Import Control:** Imports can be discouraged by increasing import duties, through import quotas, import licensing etc.

**c) Miscellaneous Measures:** Miscellaneous measures include **encouragement of foreign investment, promotion of tourism etc.**

# Devaluation

- Devaluation means a deliberate reduction of the value of the domestic currency in terms of foreign currencies.
- A country which faces a serious problem of deficit in the balance of payments may resort to devaluation. This will stimulate their export and discourage import.
- When devaluation is effected, value of the home currency goes down against foreign currency.

Suppose, the exchange rate remains \$1 = ₹10 before devaluation.

Let us suppose, devaluation takes place which reduces the value of home currency and now the exchange rate becomes \$1 = ₹20. After such a change, our goods become cheap in foreign market.

This is because, after devaluation, dollar is exchanged for more Indian currencies which push up the demand for exports. At the same time, imports become costlier as Indians have to pay more currencies to obtain one dollar.

Thus, demand for imports is reduced.

## *Limitations of devaluation*

1. Devaluation is successful only when other country does not retaliate the same. If both the countries go for the same, the effect is nil.

2. Devaluation is successful only when the demand for exports and imports is elastic. In case it is inelastic, it may turn the situation worse.

3. Devaluation, though helps correcting disequilibrium, is considered to be a weakness for the country.

# Theories of International Trade

## 1. Absolute Advantage Theory

According to Adam Smith the basis of international trade is absolute cost advantage. Suppose there are two commodities and two countries which produce these commodities. One country is efficient in the production of one commodity and thus it has an absolute advantage in the production of this commodity. The other country has an absolute advantage over the production of the other commodity. Then the countries will specialise and produce that commodity upon which they have an absolute advantage. They will export this commodity to the other country. By this process resources are utilised in the most efficient way and output of both the countries will increase. From this mutual trade both the countries will benefit.

The absolute advantage theory can be explained with the help of an example.

| | USA | UK |
|---|---|---|
| Number of Units of wheat per unit of labour | 10 | 5 |
| Number units of cloth per unit of Labour | 3 | 8 |

In the above example USA has an absolute advantage over the production of wheat over UK. Because it is able produce 10 units of wheat with one unit of labour. But UK can produce only 5 units. Similarly, UK has an absolute advantage over the production of cloth. Hence, US will produce and export wheat to UK and UK will produce and export cloth to US. Both the countries will gain from international trade.

This kind of production leads to specialisation and division of labour. But according to Adam Smith division of labour is limited to the size of the market. When there is international trade, there is ample scope for division of labour because size of the market increases substantially. However, Adam Smith theory of absolute advantage explain only one aspect of trade. It is too narrow in its scope.

## 2. Comparative Advantage Theory

Comparative cost advantage theory was developed by David Ricardo in 1857. Later it was refined by J S Mill, Marshall and others. According to Ricardo, even in the case of a country for which there is no absolute advantage for both the commodities, it can gain from international trade. In this situation, the country should specialise in the production and export of the commodity in which its absolute disadvantage is smaller and import the commodity in which its absolute disadvantage is greater. In other words, a country should specialise in the production of that commodity in which it is more efficient and leave the production of the other commodity to the other country.

The Ricardian theory is based on the following assumptions.

1. There are only two countries and two commodities

2. There are no barriers in international trade

3. There is no transport cost

4. Labour is the only component of cost of production

5. There is perfect competition and full employment

6. Labour is homogeneous

7. Labour is perfectly mobile within the country

Ricardo in his two commodity, two country model taken cloth and wine as commodities and England and Portugal as two countries.

| Country | No. of units of labour Per unit of cloth | No. of units of labour per unit of wine | Exchange ratio |
|---|---|---|---|
| England | 100 | 120 | 1 wine = 1.2 cloth |
| Portugal | 90 | 80 | 1 wine = 0.88 cloth |

The above example shows that Portugal has an absolute advantage in the production of both the commodities. However, a comparison of the ratio of the cost of wine production with ratio of the cost of cloth production in these two countries reveals that Portugal has a higher advantage in the production of wine. Hence it will specialise in wine production and produce wine. At the same time, England has a comparative advantage in cloth production and it will produce cloth. England can import wine from Portugal and Portugal can import cloth from England. Both the countries have mutual gain from trade as explained below.

In the absence of trade, one unit of wine commands 1.2 units cloth in England and 0.88 units of cloth in Portugal. When trade takes place, Portugal will gain if it can get anything more than 0.88 units of cloth for one unit of wine. Similarly, England will gain if it has to sacrifice anything less than 1.2 unts of cloth. Therefore, any exchange ratio between 0.88 and 1.2 unts of cloth for one unit of wine will bring a gain for both the countries.

## Criticism

Most of the assumptions of the theory are its limitations. The following are the important criticisms against comparative cost theory.

1. Labour is not the only element of cost.

2. Exchange ratio is not always fixed according to the cost ratios. Demand and supply play an important role in fixing the price.

3. The assumption of full employment and perfect competition are not valid.

4. The assumption of free trade (trade without barriers) is highly unrealistic.

5. According to Graham if one country is very small and other country is big complete specialisation may not be possible. The big country cannot sell its entire surplus to the small country.

## 3. The Heckscher-Ohlin Theorem or Factor Endowment Theory

The factor endowment theory was originally developed by Eli Heckscher in 1919. Later in 1935 it was refined by his student Bertil Ohlin. Hence the theory is popularly known as Heckscher-Ohlin Theorem. It is a two-country two-commodity model. The following are the important assumptions of the model.

1. There is perfect competition in the factor market and product market.

2. Factors of production are perfectly mobile within the country but immobile between the countries.

3. Factors production are homogeneous.

4. There is full employment.

5. There is free trade between countries.

6. There is no transport cost.

7. Technology remains the same in both countries.

The classical theory showed that the basis of international trade was comparative cost differences. But it did not explain the reason for comparative cost differences. The Heckscher-Ohlin theorem tried to explain the causes of comparative cost differences that exist internationally. According to the theorem, the differences in comparative advantage among nations is mainly due to the differences in relative factor abondance or factor endowments.

Heckscher-Ohlin theorem can be stated as follows. A country will produce and export that commodity whose production requires the intensive use of the nation's relatively abundant and cheap factor and import the commodity whose production requires the intense use of relatively scarce and expensive factor. In other words, relatively labour abundant country will export the relatively labour-intensive commodity and import the relatively capital-intensive commodity.

In the Heckscher Ohlin theorem factors of production are considered as abundant or scarce in relative terms and not in absolute terms. For example, a country will be considered as capital abundant only if the ratio of capital to other factors is higher when compared to other countries.

| | | |
|---|---|---|
| Country A | Supply of labour | = 50 |
| | Supply of capital | = 40 |
| | Capital- labour ratio | = 0.8 |
| Country B | Supply of labour | = 16 |
| | Supply of capital | = 20 |
| | Capital-labour ratio | = 1.25 |

In the above example, country A has more capital in absolute terms but country B is endowed with or abundant in capital because the ratio of capital to labour is high in country B.

## Factor Price Equalisation Theorem

Factor price equalisation theorem is a corollary of Heckscher-Ohlin theorem. It was proved by Paul Samuelson and hence it is called Heckscher-Ohlin-Samuelson theorem.

The theorem state that free international trade will equalise factor prices between countries relatively and absolutely and this serve as a substitute for international factor mobility. In a country, international trade increases the demand for abundant factors because specialisation takes place on the basis of factor endowments or abundance. Therefore, the prices of the abundant factors increase. Similarly, the demand for the scarce factors decreases and hence their prices also decrease. Thus, when a country export goods containing a large proportion of the relatively abundant and cheap factors and import goods containing a large proportion of scarce factors, it may act as substitute for inter-regional factor movements and lead to factor price equalisation.

## Merits of Heckscher-Ohlin theory

1. Heckscher-Ohlin theory provides a more comprehensive and satisfactory explanation for foreign trade.

2. Heckscher-Ohlin theory explain the reason for comparative cost differences between nations in terms of factor endowments.

4. The Heckscher-Ohlin theory highlights the role of relative prices of factors in determining the trade flow.

5. Heckscher-Ohlin theory highlights the impact of trade on product and factor prices.

## Effects of International Trade

According to Heckscher-Ohlin theorem, international trade has the following effects.

**1. Equalisation of factor prices:** Since specialisation takes place according to factor endowments, it equates factor prices between countries.

**2. Equalisation of Commodity prices:** International trade leads to the movement of goods from those areas where they are abundant to areas where they are scarce. This would equalise the commodity prices.

# Questions

1. What do you mean by BOP?

2. Distinguish between free trade and protection.

3. Explain the structure of BOP.

4. List any six arguments in support of protectionism.

5.Why is international trade distinguished from domestic or inter-regional trade?

6. What is free trade? What are its advantages?

7. What are the advantages and disadvantages of international trade?

# Questions

8. Distinguish between Balance of Trade and Balance of Payments.

9. State and explain the various items included in the balance of payments of a country.

10. Explain the Heckscher-Ohlin Theorem.

11.What are the main causes of India's adverse balance of payments ? Explain the measures that have been adopted to correct the adverse balance of payments.

12.Explain the comparative cost advantage theory.

13.Explain the effects of tariff in international trade.

14.Examine the tariff and non-tariff barriers to international trade.

Thank You