

Contents: Classical and modern theory of International Trade, Balance of payments nature causes, disequilibrium and correction

Classical Theory of International Trade

The Classical theory of international trade is given by Adam Smith and David Ricardo. The theory explains the condition of international trade specialization and benefits of trade.

According to the theory international trade is a case of geographical speculation. Different countries have different set of resources. In this process a country may have more of a resource. The abundance of a resource gives cost advantage in the production of a commodity. The cost advantage is the basic of specialization and international trade.

Assumptions:

1. The theory of international trade is based on the labor theory of value. With this, value of any product can be explained in term of labor units.
2. It is a 2x2 model, 2 countries and 2 commodities.
3. The theory assumes barter system of exchange.
4. It is a case of free trade without any restriction from either country.
5. No transport cost.
6. Perfect competition and full employment.
7. Factors of production are perfectly mobile within a country and immobile between countries.

The classical theory of international trade is explained is 3 parts -

- i. Absolute Cost Advantage
- ii. Equal Cost Advantage
- iii. Comparative Cost Advantage.

1. Absolute Cost Advantage:-

Given 2 countries, Portugal and England, international trade can take place when there is a clear-cut cost advantage. However, trade can take place even in absence of absolute cost advantage.

Trade can take place when the domestic exchange rates are different.

	Wine	Cloth	Domestic Exchange Rate
Portugal	5	10	100 W = 0.5 C
England	10	5	100 W = 2.0 C

If $\frac{W_p}{W_e}$ not equal to $\frac{C_p}{C_e}$ trade is possible.

$\frac{W_p}{W_e} < 1 < \frac{C_p}{C_e}$ Absolute cost advantage

International trade is indicated with a difference in the cost ratio. If the difference in the cost ratio is very large trade is possible under Absolute Cost Advantage.

2. Equal Cost Advantage

Adam Smith explains the condition in which trade is not possible. It is explained through equal cost advantage theory.

	Wine	Cloth	D.E.R.
Portugal	5 W_p	10 C_p	1W = 0.5C
England	10 W_e	20 C_e	1W = 0.5C

It can be seen that trade is not possible under present situation because domestic exchange rates are same further equality among cost ratio show that the country has cost advantage in the same commodity. Hence with equal cost advantage in the same commodity. Hence with equal cost advantage trade is not possible neither profitable.

3. Comparative Cost Advantage

	Wine	Cloth	D.E.R.
Portugal	5 W_p	10 C_p	1W = 0.5C
England	8 W_e	12 C_e	1W = 0.67C

International trade cannot always take place on grounds of absolute cost advantage. Even if a competitive cost advantage trade is possible and profitable. Further in a competitive world economy comparative cost advantage leads to trade. In the table it can be seen that trade is indicated because domestic exchange rates are different. International trade means that there are relative price differences in different countries.

1. The difference in cost rates brings out cost advantage with dissimilar cost advantage. international trade is indicated.

International trade can be seen that Portugal has +3 advantage in wine advantage in cloth. Based on comparative cost advantage Portugal specializes in wine with +3 advantage.

Similarly England has -3 disadvantage in wine and only -2 disadvantage in cloth. Hence it specializes in cloth with comparatively less disadvantage.

The narrow difference in cost ratios indicates comparative cost advantage.

The domestic exchange rates provide the limit of international exchange rate. The position of international exchange rate explains the terms of trade and benefits to each country. If the international exchange rate is close to Portugal's domestic exchange rates, England gets largest benefit.

The position of International exchange rate depends on several factors like bargaining power, level of development, nature of commodity export and import and demand elasticity of goods traded.

Evaluation :

Ricardian Theory of comparative cost advantage is a first ever theory of international trade explaining the possibilities of international trade and causes international trade identifies inter country resource variations on a base of complete specialization and trade. However there are several limitations of classical theory.

1. The theory assumed labor as the only production factor. According to all factors are equally important and resources have opportunity cost .
2. 2 X 2 model is rigid. It fails to explain multi- commodity and multi-lateral trade.
3. By considering barter system the theory neglected important international issues like currencies, conversion, international payments and liquidity.
4. Barter system and free trade did not exist in modern trade.
5. Transport cost is significant part of international trade which is not explained.
6. Trade between countries of unequal development tend to benefit advanced countries

Modern theory of international trade

Modern theory of international trade is an extension of classical theory of international trade. The comparative cost advantage theory given by Ricardo takes into account only labor as the only productive factor of production whereas, modern theory gives equal importance to all resources.

Modern theory is given by Hecksher and Ohlin. ***The modern theory of international trade does not supplant classical theory but only supplements it.***

Modern theory brings out certain relationships in the economic variables :

- a. Factor availability determines the factor prices,
- b. Factor prices determine the product prices,
- c. The difference in factor prices and product prices is the basis of cost advantage and specialization.
- d. Differences in the factor and product prices are the cause of international trade.
- e. Factors of production being immobile between countries, the factor price differences remain. The cost advantage is sustained and trade takes place.

According to modern theory, ***International trade is a special case of inter regional and inter local trade.*** Within a country the factors are mobile and factor prices will be equal. Country as a whole will be having uniform cost advantage. Whereas between countries there is no factor mobility. The factor prices remain different and the cost advantage is permanent.

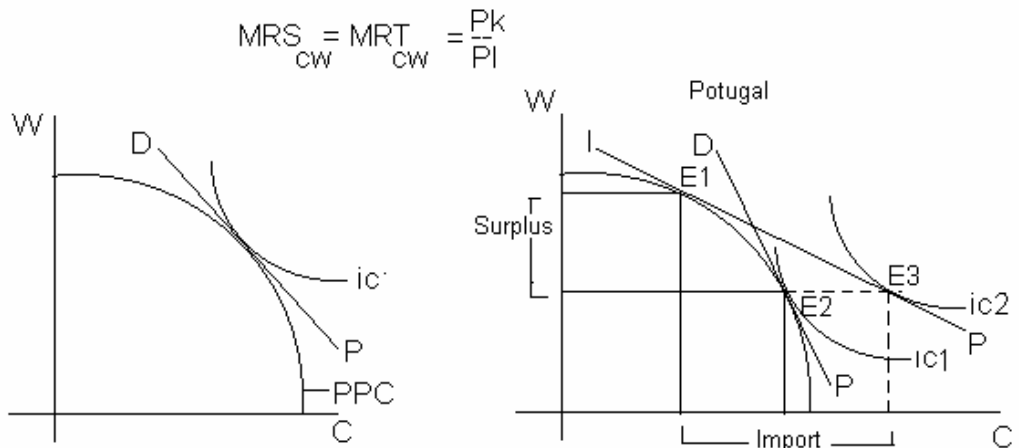
The modern theory is markedly different from the classical theory where it only proposes partial specialization. The classical theory advocated complete specialization. Partial specialization states that the country should produce both the goods but specializes in a good where it has cost advantage. This will help in sustaining the cost advantage in the long run.

Model : It is a 2x2x2 model with two countries: Portugal and England, two commodities: wine and cloth and two factors; labor and capital. The theory is explained with the help of

1. General equilibrium and
2. Factor endowment theorem

General equilibrium Analysis :

The general equilibrium analysis was originally developed by Leon Walrus. It is a case where the production equilibrium is same as the consumption equilibrium. Given closed economy in the beginning the equilibrium is found at a point where :



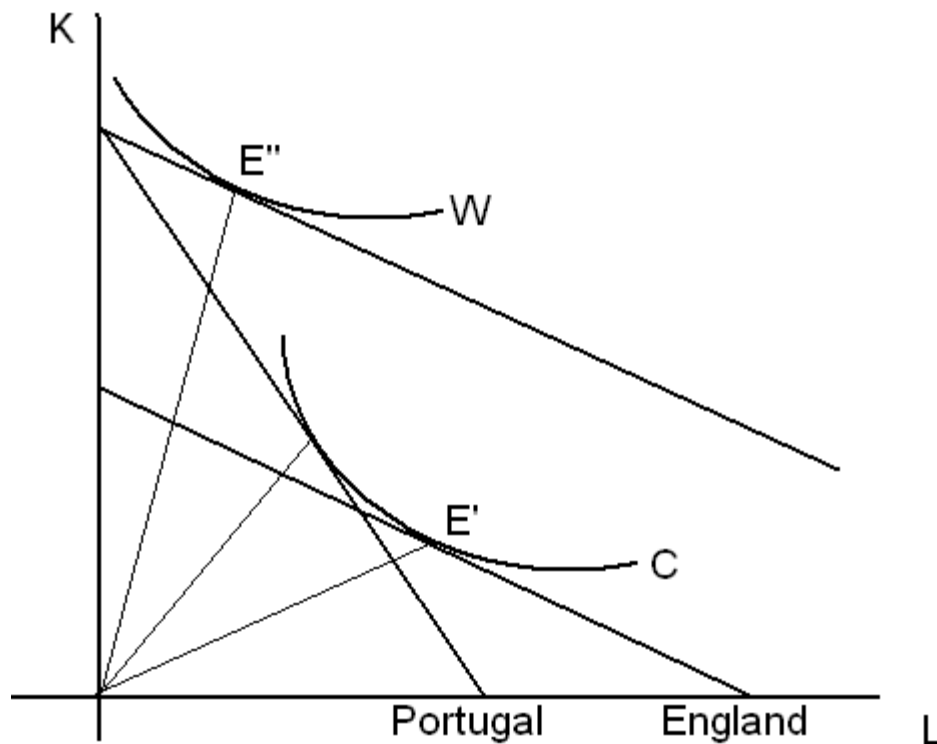
GEA was first used by Leon Walrus. The General Equilibrium is an identity between production equilibrium and consumption equilibrium. This is a model with closed economy.

With introduction of International trade the General Equilibrium will undergo a change. The international price line will be different from domestic price line. The production equilibrium will move from E1 to E2. It can be seen that at E2 Portugal produces large wine than its consumption. This is the surplus for exports. In turn Portugal will receive cloth on international price line at E3 there is an increase in the level of social gain from IC1 to IC2. It is a case of partial specialization where a country produces both goods but specializes in one.

Factor endowment theory

Modern theory of international trade is explained by Heckscher and Ohlin through Factor Endowment.

Every country has abundance in one factor. Similarly every product has different factor intensities. Then a country should produce such commodities whose factor intensity is same as its factor abundance. With this the country can claim cost advantage in production and specialization. Difference in Factor Endowment can be seen in different factor availability ratios. Such difference in ratios indicates the potential of cost advantage and trade.



It shows that Portugal has more of capital and England more of labor.

The difference in capital availability ratio is reflected in factor price ratio.

It is because of interdependence between factor availability and factor ratios.

Given these conditions Portugal shall specialize in capital intensive wine and labor intensive cloth will be produced by England.

It can be seen from the diagram that Portugal is abundant in capital and England has more of labor. Given the factor intensities it can be seen from the isoquants that cloth can be produced by both Portugal and England.

OE' suggests labor intensive technology.

OE'' suggests capital intensive technology.

England can naturally specialize in cloth. On the other hand Portugal can produce more wine than cloth. Also it is capital intensive. Portugal specializes in wine.

Modern Theory strongly suggests partial specialization. A country will produce both the goods but specializes in one.

Leontiff's Paradox

Leontiff studied American exports empirically but finds that they are labor intensive. Theoretically US exports cannot be labor intensive because American wages are one among the highest in the world. This disparity is called Leontiff's Paradox.

In fact the goods which seem labor intensive in fact were capital intensive due to large technology component. The change in production function made it look capital intensive. The Factor endowment theory holds good even with Leontiff's Paradox

Evaluation :

Modern theory of international trade still remains the only theory explaining foreign trade. As an improvement over classical theory it suggests partial specialization.

1. Like classical theory, the modern theory converses only bilateral trade with 2 goods. It fails to explain the possibility of multilateral and multi-commodity trade.
2. The important problem of international trade like difference in currencies, conversion and international payments are not covered.

3. The realistic trade relation show that free trade it replaced with protection and segments market.

4. The international exchange rate determines the terms of trade. Modern theory neglects the terms of trade between developed and underdeveloped country.

Factor price equalization

Within a country factor prices tend to equalize due to perfect factor mobility.

Within countries there is no factor mobility. But factor prices can be still equated with complete specialization.

In international trade commodity movement replaced factor movements to bring about factor price equalization.

It may be seen that complete specialization will make both the countries produce cloth. The demand for labor will increase due to labor intensive cloth.

Portugal due to complete specialization stops producing cloth and demand for labor will decrease.

Such changes it demand will equate wages it both the countries. Eventually the cost advantage may be lost during IT.

However this can be prevented by partial specialization which it suggested by Modern Theory of International Trade.

Balance Of Payments

Nature, disequilibrium and methods of correcting disequilibrium

Nature of balance of payments

Balance of payments is a systematic record of transactions between one country and rest of the world during a period of time.

Balance of payments emerge as an important feature of modern international trade, whereby the country can evaluate its position in terms of international trade, currency movements, terms of trade and strength of the currency. Balance of payments can also project the development status of the economy in terms of industrial growth, economic stability and national income.

Balance of payments is a record of transactions under two different heads:

1. Current account :

It deals with the movements of merchandise (goods) by way of exports and imports. The merchandise may be private or Governmental. Merchandise is a major item on the current account. Other items appearing under current account include :

Transportation, insurance, tourism, and foreign remittances are called as the invisibles because it involves foreign exchange flows but has no physical movement of goods. The remittances can be in or out of the country. Other items are non-monetary gold and miscellaneous head for non-classified current transactions.

Each one of these items have a credit or debit depending on the principles of double entry book keeping.

On current account there can be deficit or surplus, depending on the nature of transactions.

The position on the merchandise account is called the balance of trade. The difference between exports and imports determine the position of balance of trade. It is an important indicator because it will highlight the foreign exchange commitments of the country with respect to each country and currency.

2. Capital account :

It deals with capital movements between one country and rest of the world. Capital movements can be private, governmental or institutional (IMF, World Bank and others).It can be again classified as short term and long term capital movements.

Other items include amortization, debt servicing, monetary gold and miscellaneous. Amortization is the loan liquidated, debt servicing is the repayment of principle and interest and non-monetary gold is the payments made in terms of gold.

These capital transactions will also have a debit or credit depending on the directions of flows. Capital account can show a deficit or a surplus revealing the strength of the economy. The deficits of the current account will be financed by the capital account. So there is a spill over of deficits of current account into capital account.

Finally, the balance of payments will have the deficit or surplus, reflecting the overall position of all the international transactions.

Important ratios :

1. Balance of trade :

Balance of trade is an important indicator of the efficiency of export sector and import substitution sector. It is the position of an economy in terms of merchandise on current account. It is an important indicator because it will highlight the foreign exchange commitments of the country with respect to each country and currency.

2. Basic balance :

This is the difference between exports + inflow of long term capital AND imports + out flow of private capital. It is measure of gross movements in currencies in and out of the economy.

3. Liquidity balance :

In international trade, liquidity is a major consideration in international payments. Liquidity balance deals with the difference in the official exchange holdings over a given period of time. High liquidity balance improves the credit worthiness of a country.

4. Official settlement balance :

It is a gross indicator of financial position arising out of the balance of payments. It is the difference between exports + all private capital inflows AND imports + all private out flows. It gives a clear picture of the balance of payments position pertaining to a given time period.

Does balance of payments always balance?

Balance of trade and balance of payments :

In the classical school of thought it was popularly believed *that balance of payments should always balance*. It was backed by the idea that

under barter system of exchange, every import shall have a corresponding export. So exports will always be equal to imports.

Further, with no capital flows the payments can not be differed. With this there will not be any difference between balance of trade and balance of payments. Hence it was felt that balance of payments shall always balance.

With monetized transactions, barter is ruled out. There are capital movements which can always upset export-import equality. Moreover, what the classical economics considered balance of payments was indeed balance of trade.

There is no need for the balance of payments to balance, not even the balance of trade. There can be deficit or surplus in any of the measures. On the other and the balance of payments position reveals the strength of the country and currency.

It is desirable to have a surplus in the balance of payments . A deficit in balance of payments is called disequilibrium. Continuous deficits lead to problems of mounting external debt burden and unstable currency.

Types and causes of disequilibrium in the balance of payments

In general terms, a deficit in the balance of payments is called disequilibrium. Such a deficit may be at the capital account, current account ; occasional, chronic ; cyclical, enlarging deficits. Each type is caused by different set of factors. But in general, disequilibrium is an unfavorable position in BoP caused by continuous deficits which are large.

Types of disequilibrium in BoP :

Following are the different types of disequilibrium in BoP :

1. Cyclical disequilibrium : This is caused by the trade cycles. The economic activity changes in cyclical fashion with boom depression. In each state, the disequilibrium is caused depending on the spurt of incomes, intensity of demand for imports, domestic prices and nature of exports and imports.

The impact of cyclical disequilibrium is found in developed economies as compared with less developed economies.

2. Secular equilibrium : Secular disequilibrium depends on the level of growth in an economy.

An economy can be a primitive economy, or an economy under preparatory stage for development or an economy in the take-off stage or an economy with high mass consumption. These are the stages of growth as given by W.W.Rostow.

Secular disequilibrium is characterized by the level of population, capital accumulation, technology and resources.

3. Structural disequilibrium : This is caused mainly due to the nature and composition of exports and imports. The elasticities of exports and imports determine the efficiency of any methods of correcting the trade. For example , stagnant exports and elastic imports cause BoP problems. Correction of such disequilibrium will need structural changes in the composition of trade and foreign exchange position.

Causes of disequilibrium in developing countries :

BoP disequilibrium is common with most developing economies. Study of the factors and nature of disequilibrium will help in correction and design of methods of protection.

Following are the important causes of disequilibrium :

1. Large population, increasing growth rates of population.
2. Stagnant exports due to out dated products
3. Increasing demand for imports.
4. Low productivity and poor growth rates.
5. Lack of bargaining power.
6. Large external debt due to which the burden of debt servicing increases.
7. Adverse terms of trade.
8. Cyclical fluctuations in economic activity.
9. Problems of international liquidity.
10. Absence of ant trading association or regional block
11. Weak currency
12. Absence of trade ties with developed economies.

In addition all the problems of under development contribute to disequilibrium in BoP. Since there is no effective mechanism to correct, the disequilibrium becomes chronic.

Methods of correcting balance of payments disequilibrium

There are several methods to correct balance of payment disequilibrium. The methods depend on the nature and causes of disequilibrium.

The methods can be classified into two groups : viz. monetary and non monetary methods.

Monetary methods :

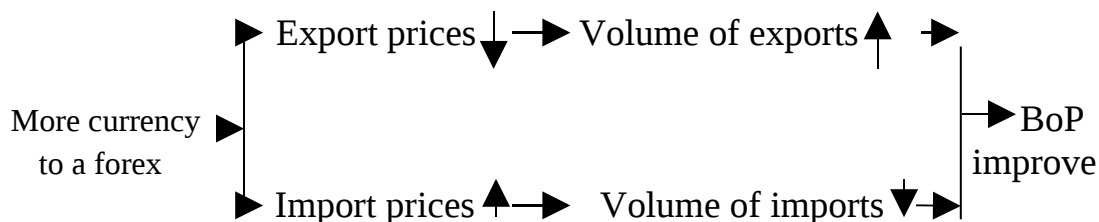
Monetary methods of correction affect the balance payments by changing the value or flow of currencies ; both domestic and foreign. Indirectly, it affects the volume and value of exports and imports.

With flexible exchange rate it is possible to affect the value and volume of exports and imports.

Following are the various monetary methods of BoP correction :

(Q. Write notes on devaluation)

1. Devaluation : Devaluation means decreasing the value of domestic currency with respect to a foreign exchange. Devaluation is done by the Government of the country of origin. Devaluation is done deliberately to get its advantages.



The Government officially declares the devaluation, indicating the extent of decrease in the value of its currency. The Government can decide the time and the amount of decrease.

Devaluation can determine a specific currency with which it is devalued. In such case the trade with the target country improves. The devaluation is irreversible. The country can not change the value of currency frequently.

With a decrease in the value of its currency, the country has to pay more in exchange to a foreign currency

In case of exports the price shows a decline to the extent of decrease. The exports become cheaper.

At the same time the imports become expensive because more domestic currency is payable.

With this the exports increase and the imports decrease.

This way the balance of payments position improves. The country gets better terms of trade.

Devaluation is opted during such times when:

- a. The imports are increasing rapidly,
- b. The exports are stagnant,
- c. The domestic currency has low demand
- d. The foreign currency is in high demand

The efficiency of devaluation , however depends on

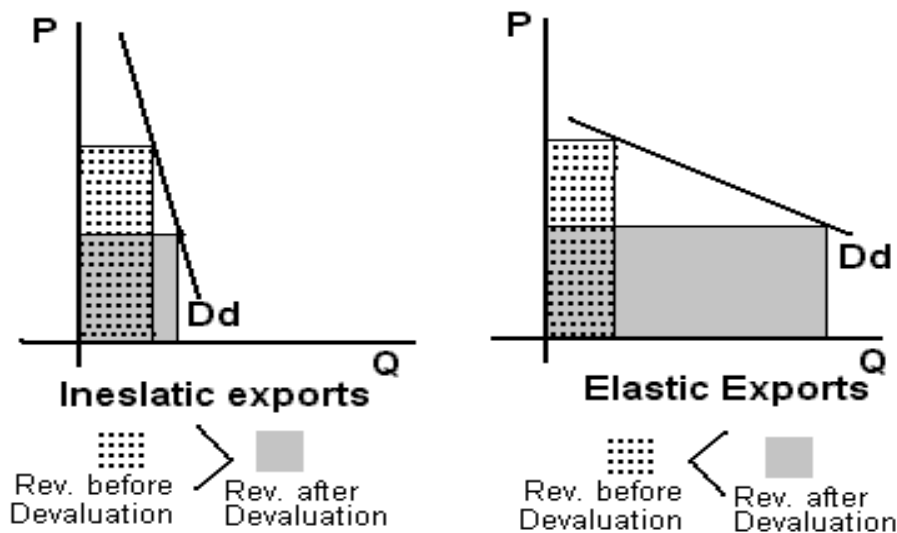
Marshall-Lerner Condition

According to the Marshall-Lerner condition. Devaluation helps only incase the elasticities of demand of exports and imports is equal to 1

$$e_x + e_m = 1$$

It is advisable to devalue currency only when the sum of the elasticities of exports and imports in equal to one.

Incasing the exports and imports are inelastic, the devaluation will help the country. Generally, the developing countries have inelastic exports and imports. Devaluation in such countries is not always useful.



In case of inelastic exports, the decrease in price can not get proportionate increase in the volume. So, there is a decrease in the revenue due to devaluation

When the exports are elastic. The increase in the volume of exports will be greater than the decrease in the price. The revenue from trade will increase after devaluation.

Similar case can be proved with imports where, outgoing are larger with inelastic imports.

The Marshall-Lerner condition stipulates the limitations of applicability of devaluation. Further, devaluation can also bring in large scale retaliation from other countries. Which again affect the BoP position the devaluating country.

There are some other methods which are similar to devaluation but the nature is different.

2. Depreciation : Depreciation is similar to devaluation but it is done by the exchange market. The exchange market is made up of demand and supply of currency. Depending on the demand and supply, the value of currency can be appreciated or depreciated, Depreciation is similar to devaluation. It involves a decrease in value.

Depreciation is done by the market, the Government has no control over the value. Further, the value changes are small and reversible depending on the demand and supply conditions.

3. Pegging operations. Pegging down the value of currency is done by the Government. The Central bank depending on the need may artificially, increase or decrease the value of currency, temporarily.

Pegging operations can be done any number of times. Since it is done by the Government, it may be beneficial. It is reversible, it offers the Government the flexibility to manage the value of the currency for its advantage.

4. Deflation: With flexible exchange rate mechanism, the domestic value of currency affects the international value of currency. The domestic value of currency can be improved by any of the anti-inflationary methods. By reducing the domestic money stock, the value of money can be improved. It improves the foreign exchange rate as well.

5. Exchange controls : Deliberate management of exchange markets, value, and volumes of currencies form the exchange controls. There are several methods of exchange controls which can affect the value and flows of currencies for improving the BoP position.

Exchange controls include methods like, pegging operations, multiple exchange rates, mutual clearing agreements etc.

It can be seen that, monetary methods of correcting BoP disequilibrium aim at solving the crisis on capital account and directly managing flow of foreign exchange. Indirectly, the value of currency can bring equilibrium on current account as well by changing volume of exports and imports.

II) Non-monetary methods : Non-monetary methods deal with real sector for correcting BoP disequilibrium. All the non-monetary methods directly affect exports and imports. Following are the important non-monetary methods :

1. Export Promotion : The country with deficits can take up export promotion measures like providing fiscal incentives, financial aid, Infrastructural facilities, marketing support and support of imported inputs.

The Government offers a package of tax incentives which will reduce the costs and make exports competitive in the world market.

2. Import Substitution : The economy can progressively develop technology of import substitution. A country produces those goods which were earlier imported. It may require import of capital goods, technology or collaborations.
3. Import Licensing : The Government can have stringent controls over the usage of imports. This can be done by licensing the users based on centralized imports.
4. Quota : Import quotas are important non-tariff barriers. They are positive restrictions on incoming goods.
5. Tariffs : Tariff is a tax duty levied on imports. The objective is to make imports expensive, which will in turn produce domestic demand and make home industry competitive.
6. Regional economic organizations: Regional economic organizations like custom unions improve bargaining power and grant better terms of trade.

Every country has to use a combination of monetary and non-monetary methods to effectively correct balance of payment disequilibrium and also prevent retaliation from any developed country.