UNIT 4 INSTRUMENTS OF TRADE POLICY

Structure

4.0 Objectives
4.1 Introduction
4.2 A Partial Equilibrium Theory of Trade
4.3 Non-Tariff Barriers to Trade
4.4 Quota versus Tariff
4.5 Exchange Control
4.6 Balance of Payments Adjustments
4.7 Flexible Exchange Rates
4.8 Fixed Exchange Rates
4.9 Let Us Sum Up
4.10 Key Words
4.11 Answers to Check Your Progress
4.12 Terminal Questions

4.0 OBJECTIVES

After studying this unit, you should be able to:

- explain the partial equilibrium theory of trade
- describe various non-tariff barriers to trade
- discuss the impact of quota and tariff
- explain the exchange control mechanism
- describe the method of balance of payment adjustments
- explain the flexible and fixed exchange rates system

4.1 INTRODUCTION

You have learnt the theories related to patterns of trade among countries in Unit 2. You have also seen that for all countries free trade is better than autarky. Even though free trade is better than a complete absence of trade, is free trade better than restricted trade, i.e., trade restricted by import tariff, import quotas or exchange controls? It turns out that the answer depends mainly on whether the country is large or small. The countries that tend to restrict trade by charging an import tariff (a tax on imported goods) are said to follow a protectionist trade policy. A tariff is a price based policy to restrict trade because it changes the price of import paid by the importer. But there are other ways to restrict trade and some of these are non-price based policies. For instance an import quota will restrict the quantity of import. These non-price based policies are known as non-tariff barriers to trade. In this unit, you will learn the partial equilibrium theory of trade and various non-tariff barriers to restrict trade. You will be further acquainted with the impact of quota and tariff, exchange control, balance of payment adjustments and the exchange rates system.

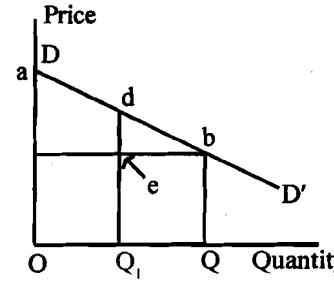
4.2 A PARTIAL EQUILIBRIUM THEORY OF TRADE

Even though the markets are generally inter-related sometimes it is useful to focus on one market provided its links with other markets are not very strong. Then a partial equilibrium theory of trade is just an extension of what you have learnt in microeconomics. Suppose.

that there are a large number of producers and consumers of a product competing in a market where the price is determined by the interaction between the suppliers and the consumers. Look at Figure 4.1 where the equilibrium price in the market is marked as P_d At the equilibrium, the quantities demanded and supplied are equal to OQ with the demand curve and the supply curve being DD' and SS' respectively. If the country is in autarky, then the consumers' welfare in equilibrium may be represented by the triangle abP_d which is known as consumer surplus.

Box 1: Consumer surplus

Let DD' be the demand curve. If the market price is Oc, then OQ is bought. For any quantity less than OQ, say OQ_1, the consumer will pay dQ_1 which is more than the the market price, $eQ_1 = Oc$. Therefore the difference between the price the consumer is willing to pay and the actual price paid, i.e., de is the consumer surplus from purchasing the Q_1th unit. Adding all these surpluses from 0 to the Qth unit we get the total consumer surplus, namely the triangle abc.



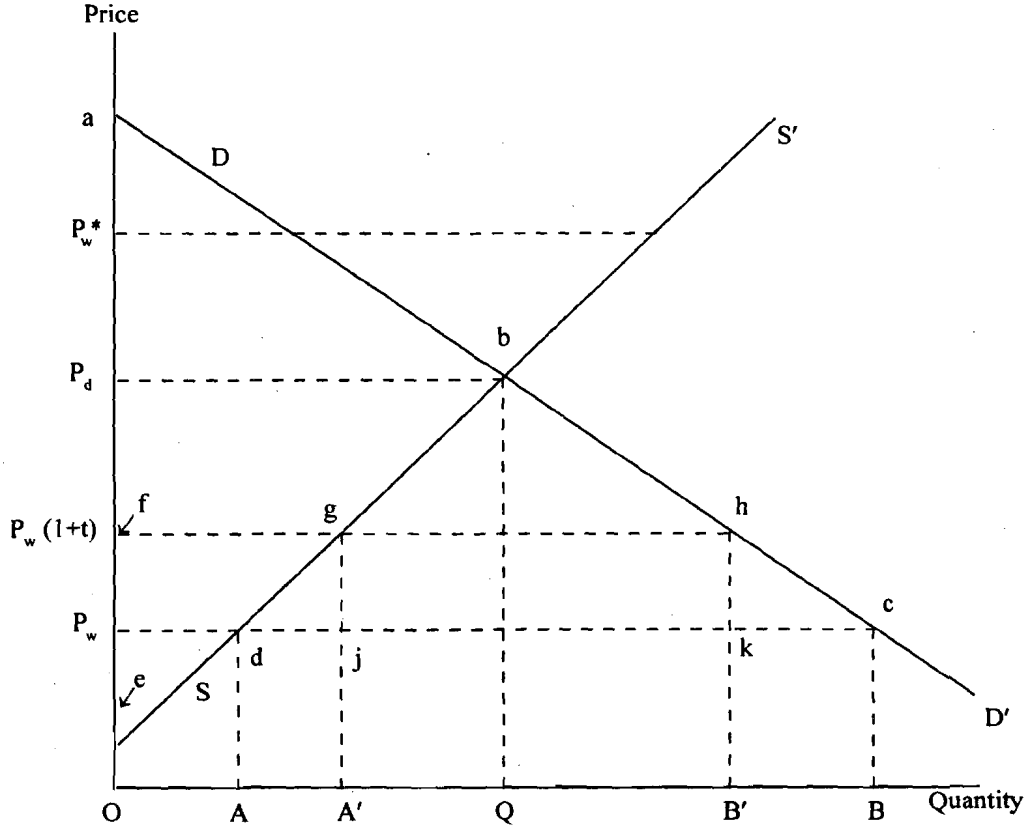
You can see in the figure that for all quantities less than OQ the consumer is willing to pay more than P_d but actually pays just P_d. When the last unit up to OQ is purchased the difference between the price offered by the consumer and the price actually paid is just zero. If we add these differences up to OQ we end up with the triangle abP_d which is the consumer surplus.

Let us now assume that the world price of this good is P_w which is less than P_d. At this stage we make an important assumption. We suppose that the country is a small country. In trade theory a small country does not necessarily mean that the country is small in size. A small country is simply a small operator in the world market and therefore does not have a monopoly power and takes the world market price as given. At P_w the country's producers will produce OA but the consumers will demand OB and the difference (AB) will be imported. Trade will increase consumer surplus to a bigger triangle, namely acP_w. The amount of increase in consumers' surplus is given by the area P_d b c P_w You should now recognise that OA is the output produced by the domestic import competing firms who were earlier producing OQ before trade. Therefore trade has hurt the import competing industry where some firms may have stopped production. But the consumers have gained. It can be shown that the producers' loss is less than the consumers' gain and therefore trade raises net social welfare. But how can we say this? Those who are familiar with the concept of producer surplus will immediately recognise that area P_d bd P_w is the loss of producers (Those who are not are referred to Box 2). Remember that the supply curve is simply the marginal cost curve under perfect competition and therefore the area under the supply curve is the total cost. Total revenue is price multiplied the quantity supplied and is measured by a rectangle. The producers' surplus is simply profit which is the difference between total revenue and total cost. Before trade when OQ was produced the profit was the triangle e b P_d which is reduced to the triangle e d P_w. The loss of profit is the area P_w d b P_d and this is certainly less than the gain in consumers' surplus given by the area P_d b c P_w. The net gain from trade is measured by the triangle bcd which shows that the society is better off with trade than with autarky.

What happens if the world price is higher than the domestic autarky price? From the figure we can easily find that the country will export the good if the world price is P_w*.

The Figure we have drawn above can be exploited a bit more to show that for a small country free trade is the best commercial policy. Let the government impose an *ad valorem* tariff on import at the rate of t. This tariff is on the value of imported goods and therefore the importers pay $P_w(1+t)$ instead of P_w for every unit of the product that is imported. If import costs $P_w(1+t)$ the domestic producers will charge no less. Therefore the import

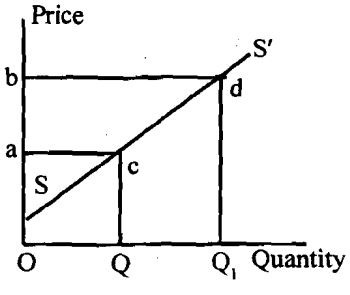
Figure 4.1: Equilibrium Price



competing firms raise price to $P_w(1+t)$ and expand output from OA to OA′. This is called import substitution. The consumers will buy less as they are paying a higher price. The quantity demanded falls from OB to OB′ and as a result the import falls from AB to A′B′. Let us work out the implications of all this. The producers' gain is measured by the area P_w d g f, the government's customs revenue by the rectangle g h k j and the loss of consumer surplus by the area fghckjdP_w. The consumers' loss is more than the producers' gain and the government's gain put together. It is easy to see that the net loss to the society (i.e., producers' gain plus government's gain minus the loss of consumers' surplus) is measured by two triangular areas, namely gjd and hkc. The net loss to the society is also known as deadweight loss.

Box 2: Producer Surplus

Let SS′ be the supply curve which is simply the marginal cost curve showing additions to cost for producing one more unit of output. The area under the supply curve for any given output gives total cost of producing that output. For example, when the output produced is OQ, the total cost is the area OQcS. Since an output of OQ is sold at a price of Oa, the total revenue is given by the rectangle OacQ. The difference between total revenue and total cost works out to be the triangular area acS which is the producer surplus or profit. As price rises to Ob and supply to OQ, the producer surplus rises by the area abdc.



What happens if do not assume that the country is a small country with no power to influence the world price? Then a tariff may not be a bad idea. The reason is that a tariff leads to a

fall in the country's demand for import. This significantly affects the world demand for the good under consideration, as the country is a major importer. This leads to a fall in the world market price P_w. Now there are two conflicting forces. First, there is a deadweight loss as we have just seen. But since P_w itself declines, the consumers are better off paying a lower price and the import competing firms are worse off because they have to lower their price. The import demand will surely rise but it will not reach the original level, i.e., AB though it will be greater than A'B'. Thus we cannot say whether the government will collect more customs revenue or not. But the fact still remains that the second set of effects may have a positive impact on social welfare which will partly offset the deadweight loss. The tariff rate which balances the deadweight loss with the gains due to a fall in P_w is known as the optimum tariff. In other words, for a large country having monopoly power in the world market will not find free trade to be the best policy but will find an optimum tariff rate which maximises its social welfare.

The partial equilibrium theory of trade applied to one good is not very meaningful because it ignores the interaction between goods. In any case it cannot tell us anything about the pattern of trade between two countries. This is why we have discussed only the general equilibrium models of trade in unit 2. But the model discussed above is not entirely valueless. If we assume that all imports of a country can be aggregated into one composite good, then we would measure the quantity index of this aggregate import on the horizontal axis and its price index on the vertical axis and use the figure 2.1 to discuss the effects of a tariff in the same way as we have done in the case of one good.

4.3 NON-TARIFF BARRIERS TO TRADE

As mentioned earlier tariff is not the only instrument to restrict trade and give protection to the domestic import competing industry. The non-tariff instruments are numerous. Recently, United States of America has decided to ban import of carpets from India on the ground that child labour is used in the Indian carpet industry to which the human rights activists have serious objections. In the past on many occasions consignments have been returned by USA on the ground that the goods pose health hazards to the citizens of the country. Thus, human rights, damage to environment, health considerations, injury to domestic industries etc. are the excuses offered by the importing country to restrict or prohibit imports. Such restrictions are called non-tariff barriers.

Various non-tariff barriers are imposed by the government to discriminate against imports or in favour of exports. Let us discuss briefly major kinds of non-tariff barriers and their implications for international trade.

Customs classification and valuation: The duty imposed on a particular import good depends on how it is classified in the tariff schedule and how it is valued by the customs authorities. This ambiguity provides customs authorities opportunity for arbitrary classification and determining value of imported goods. Customs authorities usually charge higher duties which may act as a deterrent to trade.

Subsidies: Subsidies are provided by the government to domestic producers or exporters to stimulate the expansion of such industries. For example tax exemptions, cash disbursements, preferential exchange rates, government contracts with special privileges or some other favourable treatment. Subsidies help companies to be cost competitive. Government provides various types of export assistance to exporters to make the export business more profitable and attractive.

Local content and Foreign investment performance requirement: Local content regulations are imposed on certain industries to promote import substitution and encourage the domestic producers. According to these regulations certain percentage of inputs used in the manufacture of goods are required to be procured from the domestic suppliers. In the same way, foreign investors are required to export a certain proportion of its output from the domestic country under the foreign investment performance requirement.

Technical Standards and Health Regulations: Many regulations are imposed on imports with respect to safety, health, marking, labelling, packaging and technical standards, quality standards and natural environment. Such regulations pose hardships and create barriers on foreign produced goods. As a result, some products may freely enter in one country and may be banned in another country. For example Japanese government requires that some import goods be tested in Japan even when they have already been tested in the domestic country. USA prohibits imports of many types of agricultural products on these grounds.

Government procurement: According to this policy, government purchases give preference to domestically produced goods. For example, buy American regulation of USA government provide US producers Price advantage on Defence department contracts.

Restrictions on Services: Non-tariff barriers are imposed to curtail trade in services. For example restrictions are imposed on transportation, banking, insurance, advertising, accounting, law, engineering, construction, franchising, tourism, education, health, business services, etc. on various grounds.

Besides above restrictions, there may be voluntarily export restraint, anti-dumping restrictions, specific permission requirements, administrative delays and procedures, etc.

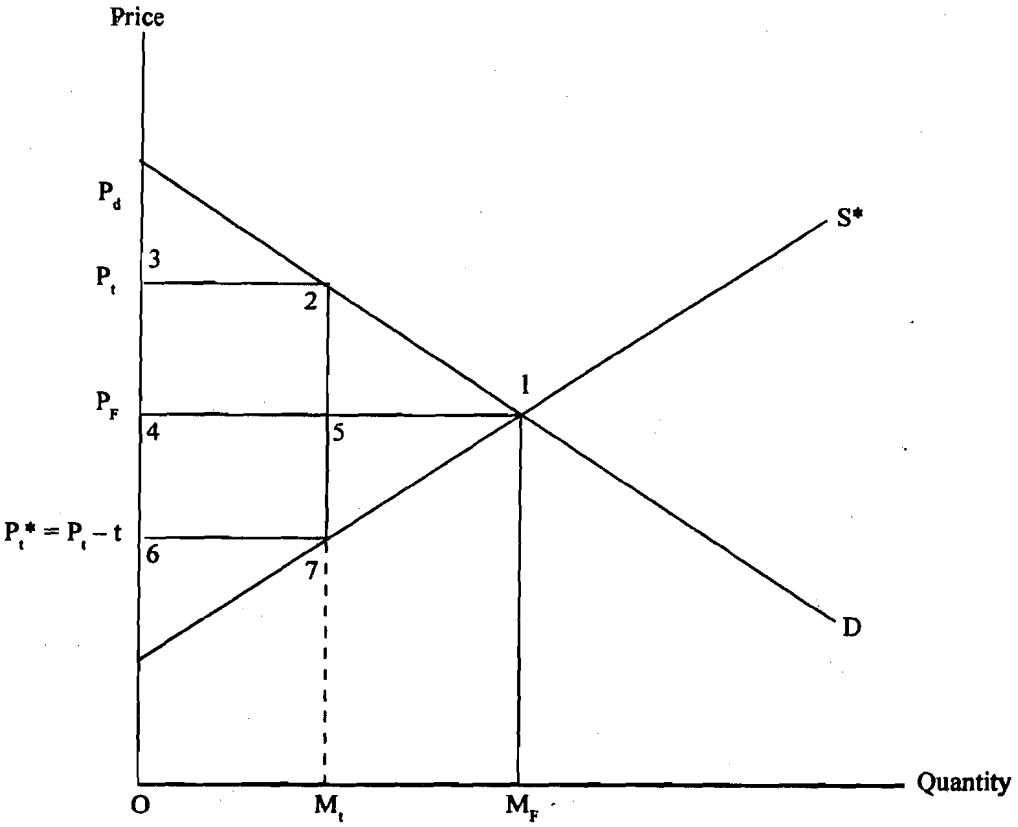
4.4 QUOTA VERSUS TARIFF

An import quota is the simplest instrument for implementing a policy of non-tariff barriers. Quota is not allowed under the provisions of the General Agreement on Tariffs and Trade (GATT). But a country may justify imposition of quota by giving the excuses mentioned above or even ban import. Such decisions may be challenged by the exporting country in the World Trade Organisation. We want to compare the effects of a quota with that of an equivalent tariff. For this purpose we shall use a diagram similar to Figure 4.1 except that now we assume that the countries having trade are large countries and are capable of influencing the world market prices. It is quite easy to derive from Figure 4.1 the importing country's demand schedule for imports. This will be simply the country's excess demand curve. In Figure 4.1 at price equal to P_d there is no excess demand and therefore the demand for import is zero. At any price less than P_d the market demand is greater than the supply and this excess demand is the demand for import. Since the country is assumed to be an importer we do not look at any price higher than P_d. In Figure 4.2 we have drawn this excess demand for import demand schedule marked as D. At the home country's autarky equilibrium price P_d home import is zero and import is positive at any price less than P_d. As price of import falls the home demand for import rises. On the other hand S* is the foreign country's supply curve which shows that higher the price higher is the quantity offered for export by the foreign country. The world trade equilibrium is at the price P_F at which the home country will import M_F quantities of the good and the foreign country will export the same quantities in free trade.

Now let us suppose that the home country imposes a specific tariff at the rate of t. A specific tariff is levied on the quantity of import, as distinguished from an *ad valorem* tariff which is on value of import.The effects of the two are not very different. As a result of the tariff the home importers will have to pay a higher price for the import, say P_t and demand less quantity of import, say M_t. But then the price in the world market will fall from P_F to P_t* which is the terms of trade effect of the tariff. Since both countries are large, a fall in the home demand for import from M_F to M_t leads to a fall in the price of import. If the home country is small country, then S* would be a horizontal line starting at P_F and there would be no terms of trade effect of the tariff. The difference between the home price and the foreign price, i.e., $P_t - P_t$* is the tariff collected from every unit imported. One can see that this tariff is partly paid by the foreign suppliers because they reduce their price from P_F to P_t* and the rest is paid by the domestic importers. Since D is the excess demand curve, the area marked numbers as 12345 is the net loss of consumers surplus after taking account of the gain in producer surplus accruing to the domestic import competing producers who get a higher price for their product as a result of the tariff. The revenue collected from tariff is 2367. Thus the net effect on social

welfare is the rectangle 4576 minus the triangle 125 which may be positive or negative. The tariff rate which balances these two influences on welfare is the optimum tariff.

Figure 4.2: Quota and Tariff



What would be the effect of a quota which is equivalent to tariff in the sense that both lead to the same reduction of import? The quota, therefore, will have to be fixed at M_t, with the stipulation imports in excess of M_t are banned. The government will issue import licences for permissible imports. The effect of this on the domestic price will be the same as tariff's effect. The domestic price will rise from P_F to P_t and the foreign price will fall from P_F to P_t^*, latter being the terms of trade effect of the quota. But the difference between the domestic price the foreign price now goes to the holders of the import licence who buy at P_t^* from the world market and sell in the domestic market at P_t. The rectangle 2367 which was the tariff revenue earlier is the rent going to the holders of the import licences. We are calling it rent because rent is the reward earned by a fixed factor of production, in this case the import licences. The government however may get it back if the imported licences are not given free but auctioned to the highest bidders. In India we never had a system of auctioning import licences. Therefore, the import licensing policy which we had prior to 1991 used to yield rent to the licence holders.

4.5 EXCHANGE CONTROL

In India before trade liberalisation in 1991 import licensing was combined with exchange control. In other words, only the holders of the import licences were given permission to purchase foreign currencies from banks. Therefore, exchange control or the control on the issue of foreign currencies was simply a part of the import licensing system. This is what has made Rupee a non-convertible currency. The current policy is that Rupee is convertible on all current account transactions which include trade in goods, travel and tourism. For these transactions no import licences are required. Many developing countries use exchange control as a means to restrict trade. The distortions that come with an exchange control policy are in the form of black markets for foreign currencies where the foreign

currencies are sold at rates much higher than the official rates. Thus, the rent goes to the sellers of foreign currencies in the black markets.

Check Your Progress A

1. What is consumer surplus?

.....

.....

.....

.....

2. What do you mean by Producer surplus?

.....

.....

.....

.....

3. What is deadweight loss?

.....

.....

.....

.....

4. State whether following statements are **True** or **False**.

   i) The partial equilibrium theory of trade applied to one good is very meaningful because it ignores the interaction between goods.

   ii) The large country having monopoly power in the world market will not find free trade to be the best policy.

   iii) A tariff leads to a fall in the country's demand for import.

   iv) The producer's surplus is the difference between total revenue and average cost.

   v) Quota is allowed under the provisions of the GATT.

4.6 BALANCE OF PAYMENTS ADJUSTMENTS

When we discuss import licensing policy or exchange control we assume that the objective of the government is to restrict import so that the domestic import competing industries are given encouragement to expand and replace imported goods. Very often, however, the government's objective is not so much to promote import substitution (because the country may not even produce the goods that are imported) but to reduce the import bill. This takes us to the concept of the balance of payment. Every country is like a company vis-à-vis the rest of the world and it has to settle accounts with the other countries. The statement of a country's financial transactions with the rest of the world is called the balance of payment statement. You may look at any issue of *Economic Survey* for India's balance of payment statement. You have also learnt the balance of payment in Unit 3. To recapitulate, the statement is divided into three parts : the current account, the capital account and the official account. The entries in the current account show values of exports and imports during the

financial year. The difference between the value of export and the value of imports (in rupees or dollars) is the balance on trade account. So we have a trade surplus or a trade deficit depending on whether the balance on trade account is positive or negative. There are other entries in the current account, like travel or tourism which are called invisibles. The invisibles are also like exports and imports of goods. When a foreign traveller comes to India and purchases hotel services, it is our invisible export. When our tourists go abroad and do the same thing, it is our invisible import. The balance on invisible trade (export minus import) plus the balance on trade account (trade deficit or surplus) is called the current account balance. Then we come to the capital account of the balance of payment statement. The transactions here are in the nature of capital import or export. If the government of India or an Indian company makes an investment abroad, say by purchasing a financial asset, it is capital export. If the foreigner invests in India it is capital import. The foreign investment may be either direct investment or portfolio investment. If a foreign company comes to India and sets up a factory or a shop to do business directly with the Indian people, it is direct investment. On the other hand, if the foreigner simply invests in shares and bonds floated by Indian companies, it is portfolio investment. There is an element of asymmetry between current account and capital account. In current account imports are items for which we make payments to the foreigners and exports are our receipts from the foreigners. In the capital account import of capital is a receipt item and the export of capital is a payment item. Therefore the balance on capital account is total capital import minus total capital export and a positive balance is a surplus and a negative balance is a deficit.

The total balance, i.e.,the balance on current account plus the balance on capital account is called the balance of payment which may show an overall deficit or surplus. A country may have a deficit in the current account but a surplus in the capital account and an overall deficit in the balance of payment.This was precisely the position in India's balance of payment in the last financial year. A balance of payment deficit simply means that certain payments are due to the foreigners and a surplus means that the foreigners are indebted to us in respect of certain payments. Since a deficit or a surplus needs adjustment, we have an official account showing how this adjustment is made. A BOP deficit may be adjusted by the Reserve Bank of India through sale of foreign currencies released from the foreign exchange reserves, or by borrowing from the International Monetary fund or by foreign aid. A surplus may be adjusted by increasing the foreign exchange reserves. When all these official transactions take place, the grand balance, i.e., balance on current account plus balance on capital account plus balance on official account, becomes zero and this has to happen by the law of accounting.

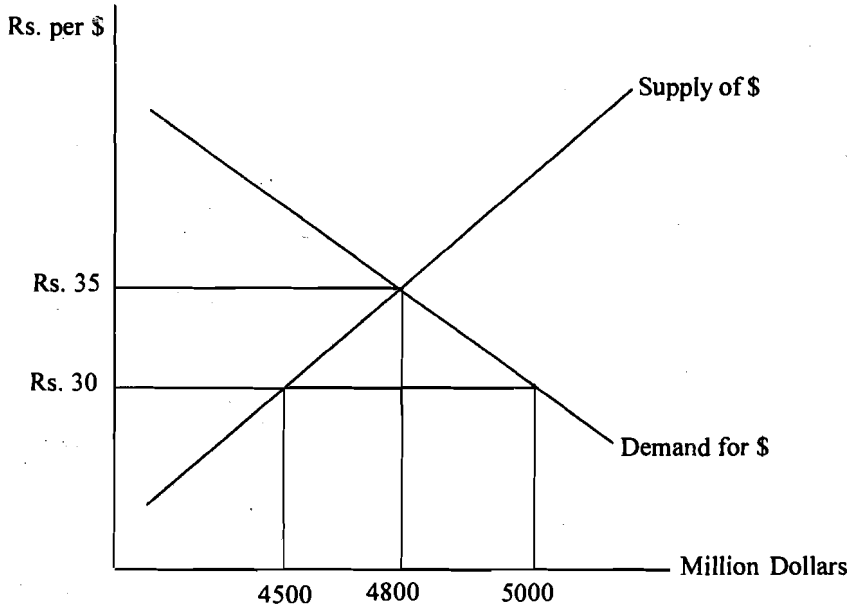
4.7 FLEXIBLE EXCHANGE RATES

There is a close relationship between the balance of payment and the exchange rates of a currency. One should notice that a deficit is simply an excess demand for foreign currencies. Let us suppose that our imports are worth $5000 million and export earnings are $ 4500 which will not be enough to pay for our imports and there is a trade deficit of $500 million which is the excess of dollar demanded by our importers over dollar supplied by our exporters. The Central bank, which in our case is the Reserve Bank of India, has two options. One is to supply $500 million from foreign exchange reserves to meet the excess demand and this will show in the official account of the balance of payment. The second option is not to supply any dollars at all in which case the excess demand for dollar will exert pressure in the foreign exchange market on the exchange value of Indian Rupee. If the Rupee rate was Rs. 30 per $ before the deficit appeared, it may change to Rs. 35 per $. Figure 4.3 shows this with the rupee-dollar exchange rate being fixed as Rs. 30 at which the demand for dollar is $5000 million and the supply of dollar is $4500 million, leaving an unadjusted deficit of $500 million. At this stage you should understand why the demand curve is downward sloping and the supply curve upward sloping. We demand dollars to import goods and services from the United States. If dollar becomes cheaper (as the rate changes from Rs. 35 to Rs. 30 per dollar) the Indian importers find American goods cheaper in Rupee terms and therefore demand more imports from USA. A good whose price is $10 used to cost Rs. 350. But now it will cost Rs. 300. We assume that the increase in Indian demand for U.S. goods does not affect the prices (measured in $) in the U.S. Since the importers would purchase more quantities but pay the same dollar prices, the demand for dollar increases. This is the reason why the demand

downward sloping. The supply curve is upward sloping because more expensive the dollar is (as the rate changes from Rs. 30 to Rs. 35 per dollar) higher is the income in rupees from exports to the U.S. per unit of a good exported and greater is the quantity exported. Again, assuming the U.S prices are fixed, the amount of dollar supplied by the Indian exporters is more.

Now the question is how the deficit of $500 million at the exchange rate of Rs. 30 per $ is adjusted. Under the fixed exchange rate system RBI sells $500 to keep the rate fixed at Rs. 30 and this shows up in the official account of the balance of payment statement. If nothing is done by RBI the rate will automatically change to Rs. 35 per $. This adjusts the deficit in the following way: With $ being more expensive our import demand falls from $5000 million to $4800 million. The exporters find it profitable to export more to earn a greater export revenue which increases from $4500 million to $4800 million. This is the adjustment under the flexible exchange rate system and RBI simply does not intervene in the foreign exchange markets. If the exchange rates are freely flexible, there cannot be a deficit of a surplus in the balance of payment because such imbalances are automatically adjusted in the foreign exchange markets. The system we have at the moment in India can be regarded as a flexible exchange rate system. The Reserve Bank does not normally intervene in the market unless there are special reasons to do so.

Figure 4.3: Balance of Payment and Exchange Rates



Rupee is said to depreciate against foreign currencies in the case of a deficit in the balance of payment and appreciate in the case of a surplus. But the story of flexible exchange rates does not end here. Under this system the exchange rates fluctuate in response to changes in the demand and supply conditions in the foreign markets where the demand and supply curves keep shifting. When the exchange rates change, i.e., appreciate or depreciate, the economy has to adjust to the new rates in several ways. Let us suppose that rupee depreciates against $ and the rate changes from Rs. 30 to Rs. 35 per $. Does this eliminate the deficit? In terms of the figure drawn above it does. But the figure shows the demand and supply curves of a particular time period. Can the deficit come back in the next period? The answer is yes. Due to the depreciation of Rupee, Dollar is now more expensive causing a decrease in our imports. Since imports supplement domestic supply of goods and services, a decrease in imports leads to shortage and an increase in the general price level. Quite a lot of these imports are used in the export industries as inputs and a shortage of these imported inputs raises the prices of the exportables. So you see that currency depreciation may very well raise the inflation rate and erode our comparative advantage. With the prices of Indian exports rising, our exports will suffer in the world market and we will be able to export less goods and services. With the fall in exports the deficit may come back which would then require further

depreciation. In fact there is a theory according to which the rate at which Rupee has to depreciate is equal to the rate of inflation. But there may be inflation in the rest of the world also which tends to improve our comparative advantage. **Thus the theory, known as the purchasing power parity theory, predicts that under the flexible exchange rate system the rate at which Rupee will depreciate will be equal to the difference between the Indian inflation rate and the inflation rate in the rest of the world.**

The adjustment of the price level is one aspect of the adjustment process. Another aspect is the effect of the depreciation on terms of trade. It is quite obvious that depreciation makes our imports more expensive in rupee terms. The prices of exportables are rupee prices because these are goods produced at home whereas the prices of importables are measured in the currencies of the countries from which these goods are imported. **After Rupee depreciates the rupee prices of importables rise relative to the rupee prices of exportables causing a deterioration in the commodity terms of trade.**

So far we have only looked at transactions in the current account of the balance of payments. Let us now turn to the capital account and see what implications a currency depreciation has for capital flows. Let us assume that there is free movement of capital between India and the United States. Let the interest rates in the two countries be denoted as r_i and r_u respectively. If there are no barriers on the movement of capital the two interest rates should be the same. This however is not true. The Indian investors in the U.S capital market will compare the two rates and will invest only if the U.S rate is higher than the Indian rate. But what happens when this investment in the U.S. matures? The Indian investor will convert his principal and interest income from dollar to rupee and in this conversion the investor may lose if dollar depreciates against rupee (or, which is the same thing, rupee appreciates against dollar). Let us suppose that dollar is expected to depreciate against rupee by d %. Then the Indian investor will compare r_i with $r_u - d$, the latter being the interest rate in the U.S. net of the expected depreciation of dollar. If capital movement is free, then these two will be equated by the market forces: $r_i = r_u - d$. **This gives us a condition known as interest parity condition which says that the expected rate of depreciation of dollar is equal to the difference between the U.S. interest rate and the Indian interest rate.** Thus we see that the exchange rate variations under the flexible rate system and free capital mobility is also related to the changes in the interest rates.

4.8 FIXED EXCHANGE RATES

As mentioned above, the adjustment of a deficit in the balance of payment under the fixed exchange rate system calls for official intervention in the markets. To maintain the exchange rates fixed RBI will have to supply the excess foreign currencies demanded in the market either from its reserves or from international borrowing. Such actions have monetary implications. The Indian importers purchase these additional foreign currencies they need for additional imports (which is the deficit) with Indian Rupee. Thus the Indian currency changes hand from the public to RBI through the banking system. The result is a fall in money supply in the process of adjustment of the deficit. A fall in money supply may lead to a fall in the price level which you may work out by using the familiar quantity theory of money. This improves our comparative advantage. Our exports become cheaper and sell more in the world market and the cheaper domestic import substitutes replace a part of our imports. This is how the deficit is adjusted. Remember that if all this do not happen, the deficit which was adjusted this year by sale of foreign currencies by RBI will reappear in the next year. **Thus under the fixed exchange rate system a deficit in the balance of payment is adjusted by money supply changes and the consequent changes in the price level.**

The link between the money supply and the price level is not as simple as that given by the quantity theory of money. The quantity theory assumes that the economy has full employment of resources and therefore an increase in money supply creates a situation in which too much money chases a fixed quantity of goods and services produced by the available resources that are all fully utilised. This causes price rise. Similarly, a decrease in the money supply reduces the aggregate demand for the fixed quantity of goods produced by

fully employing the available resources leading to a decrease in the prices. But such a simple relationship between the money supply and price level does not hold in the Keynesian world where the resources are not fully employed. The reason is that as money supply increases, the aggregate supply of goods and services may increase due to the fact that the resources are still not fully utilised and therefore the price level need not rise. Similarly, a decrease in the supply of money does not necessarily lead to a fall in the price level. But then the question that arises is this : if the price level is not affected by money supply due to unemployment of resources, how would a balance of payment deficit be adjusted ? In the Keynesian model the adjustment takes place through income changes. Under the system of fixed exchange rates, as explained in the preceding paragraph, a deficit would lead to a decrease in money supply. This would cause an increase in the rate of interest and a fall in national income.To understand this process you have to read a book on macroeconomics, particularly the part which discusses the IS-LM curves. But let us try to understand the Keynesian process of adjustment intuitively. A fall in the supply of money caused by the deficit will bring in a shortage in the credit markets : the borrowers want to borrow but the lenders do not have enough money balances to meet their demand for funds. Therefore the existing supply of funds will have to be rationed. In a market economy this rationing takes place through the price mechanism. The lenders start charging higher rates of interest to take advantage of the shortage of funds and some borrowers, not able to afford the higher interest rates, would opt out of the fund market. This is the reason why the rate of interest rises as money supply falls. The higher interest rates discourages private investment and a fall in investment reduces national income by a multiplier effect. But the fall in income also reduces the demand for import. This last effect eliminates the deficit and as a matter of fact the income will keep falling till import demand is reduced sufficiently to eliminate the deficit. **Thus, under the fixed exchange rate system a deficit in the balance of payment is adjusted by a fall in the national income, if the resources are not fully employed. This is the Keynesian theory of adjustment. The adjustment through the changes in the price level discussed earlier is known as the classical theory of adjustment.**

Check Your Progress B

1. What is Balance of Payment?

.....

.....

.....

.....

2. What do you mean by purchasing power parity theory?

.....

.....

.....

.....

3. What is fixed exchange rates?

.....

.....

.....

.....

4. State whether following statements are **True** or **False.**

   i) The difference between the value of exports and the value of imports is the balance on trade account.

   ii) There is a close relationship between balance of payment and the exchange rates of a currency.

   iii) Rupee is said to appreciate against foreign currencies in the case of a deficit in the balance of payment.

   iv) A fall in money supply may lead to a rise in the price level.

   v) Under the fixed exchange rate system, a deficit in the balance of payment is adjusted by a fall in the national income, if the resources are not fully employed.

4.9 LET US SUM UP

Trade policy is an important instrument to regulate the foreign trade. Government impose restrictions to protect the domestic industries. The restrictions may be in the form of tariff and non-tariff barriers. A tariff is a price based policy to restrict trade. Non-tariff barriers may affect either price or quantity directly. The major non-tariff barriers include: customs classification and valuation, subsidies, local content and foreign investment performance requirement, Technical standards and health regulations, Government procurement, Restrictions on services, quota, etc. Exchange control and balance of payment adjustments are another means of regulating the foreign trade.

4.10 KEY WORDS

Tariff: It refers to a tax imposed by a government on physical goods as they move into or out of a country.

Non-Tariff Barriers: Government policies and administrative practices that regulates or restrict the foreign trade.

Quota: Quantitative measures of restrictions imposed by the government to regulate the international trade.

Subsidies: Payment made by the government to the domestic producers or exporters to stimulate the expansion of such industries.

Balance of Payment: An accounting record of transactions between the residents of one country and the residents of the rest of the world over a given period of time.

4.11 ANSWERS TO CHECK YOUR PROGRESS

A 4 i) False; ii) True; iii) True; iv) False; v) False.

B 4 i) True; ii) True; iii) False; iv) False; v) True.

4.12 TERMINAL QUESTIONS

1. Critically examine the partial equilibrium theory of trade.
2. Distinguish between tariff and non-tariff barriers. Explain various non-tariff barriers to restrict the international trade.
3. Describe the impact of quota and tariff.

4. What do you mean by balance of payment. Explain the relationship between the balance of payment and the exchange rates of a country with suitable example.

5. Write short notes on:

   i) Consumer surplus

   ii) Producer surplus

   iii) Flexible exchange rate

   iv) Fixed exchange rate.

SOME USEFUL BOOKS

Anant K. Sundaram and J. Stewart Black, *The International Business Environment—Text and Cases,* Prentice Hall of India (Recent Edition), New Delhi.

Donald A. Ball and Wendell H. Mc Culloch, Jr. *International Business—Introduction and Essentials,* Business Publications Inc. (Recent Edition), Texas, USA.

Franklin R. Root, *International Trade and Investment,* South Western Publishing Co. (Recent Edition), Ohio, USA.

John D. Daniels and Lee H. Radebaugh, *International Business—Environment and Operations,* Addison Wesley (Recent Edition), New York.

Richard E. Caves, Jeffrey A. Frankel and Ronald W. James, *World Trade and Payments — An Introduction,* Scott, Foresman and Company (Recent Edition), Illinois.

Rugman and Hodgetts, *International Business— A Strategic Management Approach,* McGraw Hill Inc. (Recent Edition), New York.

Vern Terpstra and Ravi Sarathy, *International Marketing,* The Dryden Press (Recent Edition), New York, USA.