

employed in the production of either wheat or cloth. However, the country will be interested in producing some combinations of two goods instead of one. The various combinations of wheat and cloth that U.S.A. can produce are shown by a production possibility curve (PP) in the Fig. 12.1 below, which is straight line, since constant returns to scale in the production has been assumed.

On the X-axis, we measure the units of cloth and along Y-axis, units of wheat. The country can produce both the goods at any point lying on the production possibility curve PP and not outside the curve. If it decides to produce at K, then it produces 50 units of each cloth and wheat. The production possibility curve is straight line implying that to produce a unit of wheat; same unit of cloth has to be forgone. Thus, opportunity cost in our example is 1:1. In the same fashion we can draw production possibility curve of another country, India. Let us suppose that India can produce either 100 units of cloth or 50 units of wheat. Thus the opportunity cost of producing cloth in terms of wheat is 1:1/2. Trade will benefit both the countries. Wheat is relatively cheaper in the U.S.A and cloth is relatively cheaper in India. This is because to produce one unit of cloth, U.S.A has to sacrifice one unit of wheat whereas, to produce the same unit of cloth in India, it has to sacrifice 1/2 unit of wheat. This clearly shows that U.S.A has comparative advantage of production in wheat and India has a comparative advantage in the production of cloth. Thus, U.S.A will export wheat and import cloth and India will export cloth and import wheat from U.S and in this way both the countries will gain from trade.

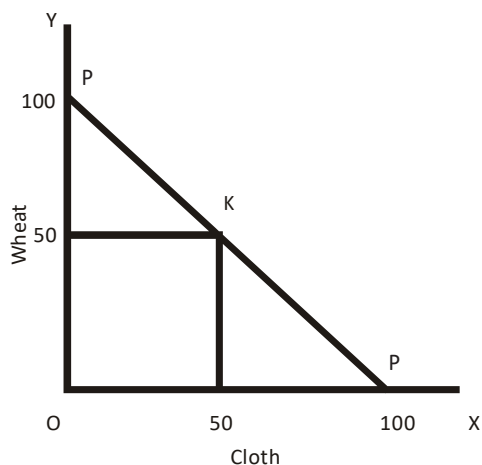


Fig. 12.1

UNIT-5

MODERN THEORY OF INTERNATIONAL TRADE—HECKSCHER AND OHLIN

The Modern theory of international trade was developed by Eli Heckscher and Bertil Ohlin. According to them, the immediate cause of international trade is the differences in the relative prices of commodities between the countries. These differences arise on account of the differences in the factor supplies in the two countries. The theory is based on the following assumptions:

1. There are only two factors-labour and capital.
2. There are only two countries and one country has abundant capital and another country has abundant labour.

3. There are only two commodities, the production of which uses both the factors.
4. There is perfect competition both in the product and factor markets.
5. There is full employment of resources.
6. There is no change in technology.

Heckscher and Ohlin predicted that the capital surplus country would specialize in the production and exports of capital intensive goods and the labour abundant country would specialize in labour intensive goods.

Factor Abundance

Factor abundance can be defined in terms of factor prices. Accordingly, a country in which capital is relatively cheap and labour relatively more costly, is regarded as the capital abundant country, regardless of the physical quantities of capital and labour available in this country compared with the other country. Labour abundant country is one where labour is relatively cheaper than capital. Ohlin finds that the differences in factor prices are due to differences in factor supplies in the two countries.

Factor abundance can also be defined in physical terms. According to this criterion, a country is relatively capital abundant if it is endowed with a higher proportion of capital to labour than the other country. Similarly, labour abundant country is defined as the country in which labour is surplus than capital. Thus, a country 'A' would be capital abundant and country 'B' would be labour abundant if the following condition is met:

$$\frac{F_A}{L_A} > \frac{F_B}{L_B}$$

where K_A and L_A are the total amounts of capital and labour respectively in country A, and K_B and L_B are the capital and labour amounts in country B. Since, country A is capital abundant, it will produce capital intensive goods and country B will produce labour intensive goods. This is shown in the Fig. 12.2. The production possibility curve of country A is shown by the curve AB and that of country B by CD. Steel is capital intensive good while cloth is labour intensive good. If the two countries produce the goods in the same proportion along OR ray, then country A would produce at Q' on its production possibility curve AB and country B at Q'' on production possibility curve CD. It can be seen that the slope at Q' is more steep than at Q''. In other words, the commodity price line shown by P'P' is steeper than P''P''. This means that steel is cheaper in country A and cloth is cheaper in country B, provided that two countries produce at Q' and Q'' respectively. Thus, country A would produce more of steel than cloth and export to country B and country B would focus itself in the production of cloth and export it to country A. It is seen above that there is greater degree of specialization in the two countries in the production of those goods, in which they are abundant. But complete specialization is absent because of diminishing returns to scale conditions with respect to both the goods. It is to be noted here that, production and export of a country's goods depend upon demand factors. If the tastes of the consumers in regard to goods are identical, then the theory is valid on the basis of physical definition of factor abundance.

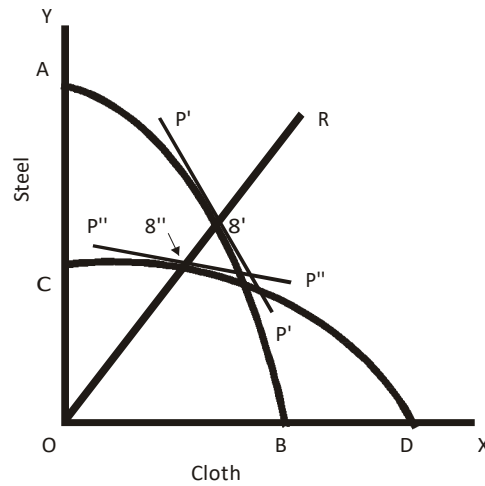


Fig. 12.2

TERMS OF TRADE

Terms of trade is the rate at which a country exchanges its exports with its imports. Terms of trade are of immense use and significance. The gains from trade depend upon the terms of trade. There are many concepts of terms of trade. The most relevant concepts keeping in mind the scope of study are as explained below:

Gross Barter Terms of Trade

The gross terms of trade is the ratio quantity of imports index to the quantity of exports index. Thus, if T_G stands for gross terms of trade, M for imports and X for exports, then gross terms of trade is expressed as,

$$T_G = \frac{M}{X}$$

The higher the ratio of imports to exports, the better the terms of trade. The quantity index of imports and exports for the base year will always be equal to 100. Base year is used to measure changes in the gross terms of trade in any given year.

Net Barter Terms of Trade

Net barter terms of trade is the ratio of price indices of exports to imports of a country. Symbolically,

$$T_N = \frac{X_p}{M_p}$$

where X_p and M_p are price index numbers of exports and imports respectively, T_N stands for net barter terms of trade. Improvement in this terms of trade would mean increase in the economic welfare of the country.

UNIT-5

Income Terms of Trade

It is the ratio of the value of exports divided by the price index of imports. Income terms of trade helps in correcting movements in net barter terms of trade for changes in export volume. Symbolically,

$$T_r = T_N \cdot X$$

or

$$T_r = \frac{X}{M_p} \times X$$

$$T_r = \frac{X_p \cdot X}{M_p}$$

Questions for Review

1. What do you mean by international trade?
2. What is meant by absolute and comparative advantage?
3. What is meant by relative factor price difference?
4. Explain absolute factor price difference.
5. Why does trade take place between two countries?
6. Explain the theory of comparative costs in international trade.
7. What is meant by terms of trade? How are they measured?
8. Examine the Hecksher-Ohlin's theory of international trade.
9. Point out differences between internal and international trade.
10. What do you mean by gains from trade?
11. What is net terms of trade?

PART B

**INTRODUCTORY
MACROECONOMICS**

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