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B.A Economis(Part – III) Paper – VIII, Group -B) International Economics

# <u>Comparative Cost Theory:</u>

The principle of comparative costs is based on the differences in production costs of similar commodities in different countries. Production costs differ in countries because of geographical division of labour and specialisation in production. Each country specialises in the production of that commodity in which its comparative cost of production is the least. Therefore, when a country enters into trade with some other country, it will export those commodities in which its comparative production costs are less, and will import those commodities in which its comparative production costs are high. This is basis of international trade, according to Ricardo.

### Assumptions of the Theory:

The Ricardian doctrine of comparative advantage is based on the following assumptions:

- (1) There are only two countries, say A and B.
- (2) They produce the same two commodities, X and Y
- (3) Tastes are similar in both countries.
- (4) Labour is the only factor of production.
- (5) Prices of the two commodities are determined by labour cost, i.e.. the number of labour-units employed to produce each.
- (6) Commodities are produced under the law of constant costs or returns.
- (7) Trade between the two countries takes place on the basis of the barter system.
- (8) There is free trade between the two countries, there being no trade barriers or restrictions in the movement of commodities.
- (9) No transport costs are involved in carrying trade between the two countries.
- (10) The international market is perfect so that the exchange ratio for the two commodities is the same.

# <u>Cost Differences:</u>

The theory of comparative costs is explained by taking three types of differences in costs: absolute, equal and comparative.

### (1) Absolute Differences in Costs:

There may be absolute differences in costs when one country produces a commodity at an absolute lower cost of production than the other.

The absolute cost differences are illustrated in Table - 1

Country	Commodity-X	Commodity- Y
А	10	5
В	5	10

#### **Table-1:** Absolute cost differences in costs

The table reveals that country A can produce 10 X or 5F with one unit of labour and country B can produce 5X or 10K with one unit of labour.

In this case, country A has an absolute advantage in the production of X (for 10 X is greater than 5 X), and country B has an absolute advantage in the production of Y (for 10 Y is greater than 5 Y).

Trade between the two countries will benefit both, as shown in

Table-2 Country Production Production Gains from before Trade after Trade Trade Commodity (1) (2) (2-1) Χ Y Χ Υ Χ Y Α 10 5 20 +10 -5 В 5 10 20 -5 +10 Total 15 20 20 15 +5 +5 Production

**Table-2** reveals that before trade both countries produce only 15 units arch of the two commodities by applying one labour-unit on each commodity. If A were to specialise in producing commodity X and use both units of labour on it, its total production will be 20 units of X. Similarly, if B were to specialise in the production of Y alone, its total production will be 20 units of Y. The combined gain to both countries from trade will be 5 units of X and Y.

### (2) Equal Differences in Costs:

Equal differences in cost arise when two commodities are produced in both countries at the same cost difference. When cost differences are equal, no country stands to gain from trade. Hence international trade is not possible.

### (3) Comparative Differences in Costs:

Comparative differences in cost occur when one country has an absolute advantage in the production of both commodities, but a comparative advantage in the production of one commodity than in the other. The comparative cost differences are illustrated in Table -3

Country	Commodity – X	Commodity – Y
А	10	10
В	6	8

**Table- 3: Comparative Differences in costs** 

The table reveals that country A can produce 10X or 10Y, and country B can produce 6X or 8X.

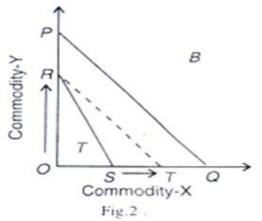
In this case, country A has an absolute advantage in the production of both X and Y, but a comparative advantage in the production of X. Country B is at an absolute disadvantage in the production of both commodities but its least comparative disadvantage is in the production of Y. This can be seen from the fact that before trade the domestic cost ratio of X and Y in country A is 10: 10 (or 1:1), while in country B, it is 6:8 (or 3:4). If they were to enter into trade, country A's advantage over country B in the production of commodity X is 10X of A / 6X of B or 5/3, and in the production of Y, it is 10Y of A/8Y of B or 5/4. Since 5/3 is greater than 5/4, A's advantage is greater in the production of commodity X, A will find cheaper to import commodity Y from country B in exchange for its X.

Similarly, we can know the comparative disadvantage of country B in the production of both commodities. In the case of commodity X, country B's position is 6X of B/10X of A or 3/5. In the case of commodity Y, it is 8Y of B/10Y of A or 4/5.

Since 4/5 is greater than 3/5, B has least comparative disadvantage in the production of Y. It will trade its Y for X of country A.

In other words, country A has a comparative advantage in the production of commodity X', and B has least comparative disadvantage in the production of Y. Thus, trade is beneficial for both countries.

The comparative advantage position of both countries is illustrated in Figure Fig- 2



Let PQ be the production possibility curve of country A and RS of country B. The curve PQ shows that country A has an absolute advantage in the production of both commodities X and Y respectively over country B. This is due to the fact that the production possibility curves RS of country B lies below the production possibility curve PQ of country A. Country B produces OR units of commodity Y and OS units of commodity X.

To show comparative advantage position in trade, A line RT is drawn parallel to line PQ. Now country A has a comparative advantage in the production of commodity X only because it exports OT (> OS) units relatively to country B. On the other hand, country B has least comparative disadvantage in the production of commodity Y only. This is because, if it gives up resources required to produce OS units of X, it would be able to produce commodity Y by an amount less than OR. Thus country A has a comparative advantage in the production of commodity X, and country B has least comparative disadvantage in the production of commodity X.

# <u>Its Criticisms</u>:

The principle of comparative advantage has been the very basis of international trade for over a century until after the First World War. Since

then critics have been able only to modify and amplify it. As rightly pointed out by Professor Samuelson, "If theories, like girls, could win beauty contests, comparative advantage would certainly rate high in that it is an elegantly logical structure."

But the theory is not free from some defects. In particular, it has been criticised by Bertin Ohlin and Frank D. Graham. We discuss some of the important criticisms as under.

- (1) Unrealistic Assumption of Labour Cost:
- (2) No Similar Tastes:
- (3) Static Assumption of Fixed Proportions:
- (4) Unrealistic Assumption of Constant Costs:
- (5) Ignores Transport Costs:
- (6) Factors not fully Mobile Internally:
- (7) Two-Country Two-Commodity Model is Unrealistic:
- (8) Unrealistic Assumption of Free Trade:
- (9) Unrealistic Assumption of Full Employment:
- (10) Self-Interest Hinders its Operation:

# <u>Conclusion</u>:

Despite these weaknesses, the theory has stood the test of the times. Its basic structure has remained intact, even though many refinements have been made over it. To conclude with Professor Samuelson, "Yet for all its over simplifications, the theory of comparative advantages has in it a most important glimpse of truth. Political economy has found few more pregnant principles. A nation that neglects comparative advantage may have to pay a heavy price in terms of living standards and potential rates of growth."