INTERNATIONAL BUSINESS AND TRADE

UNIT-3

PART-I

TERMS OF TRADE

Terms of trade (TOT) is a measure of how much imports an economy can get for a unit of exported goods.

Since, economies typically export and import many goods, measuring the TOT requires defining price indices for exported and imported goods and comparing the two. A rise in the prices of exported goods in international markets would increase the TOT, while a rise in the prices of imported goods would decrease it.

A country's terms of trade measures a country's export prices in relation to its import prices, and is expressed as: **(Index of export price/ index of import price) ×100**

HISTORY

The term (barter) terms of trade were first coined by the US American economist Frank William Trussing in his 1927 book "International Trade". However, an earlier version of the concept can be traced back to the English economist Robert Torrens and his book "The Budget: On Commercial and Colonial Policy" published in 1844, as well as to John Stuart Mill's essay "Of the Laws of Interchange between Nations" and "the Distribution of Gains of Commerce among the Countries of the Commercial World" published in the same year, though allegedly already written in 1829/30.

BREAKING DOWN 'TERMS OF TRADE'

- Terms of trade, when used to help determine how healthy a country's economy is, can lead analysts to draw the wrong conclusions.
- It is essential for analysts to know why exports increase, in relation to imports, specifically because terms of trade are impacted by the changes that occur in the prices of exports and imports.
- Terms of trade measurements are often recorded in an index so that economic monitoring can be performed.

TYPES OF TERMS OF TRADE

Main types of terms of trade, according to Jacob viner and Meier are follows:

1) Net barter or commodity terms of trade.
2) Gross barter terms of trade.
3) Income terms of trade.
4) Single factorial terms of trade.
5) Double factorial terms of trade.
6) Real costs terms of trade.
7) Utility terms of trade.

1) NET BARTER OR COMMODITY TERMS OF TRADE

♣ Commodity terms of trade are expressed in a formula as –

$$TC=PX/pm$$

(Here, TC= commodity terms of trade;

PX= index of export prices;

pm= index of import prices).

♣ Commodity terms of trade in different time period can be measured by the following formula:

$$Px1/pm1: pxo/pmo$$

(Here, px1= index of export prices in the current year,

pm1=index of import price in the current year;

pxo=index of export price in the base;

pmo=index of import prices in the base year).

- **NET BARTER OR COMMODITY TERMS OF TRADE CRITICISM:**

The principle of commodity terms of trade has been criticized on the following grounds:

- The principle of commodity terms of trade is based on export and import prices indices. It does not take into consideration the changes in composition of the foreign trade and quality of the goods. The concept examines short-terms changes only. It throws no light on long-term changes.

2) GROSS BARTER TERMS OF TRADE

Gross commodity terms of trade are expressed in a formula as under:

$$TQ = qm/qx$$

(Here, TQ= gross barter terms of trade;

qm=quality of imports;

QX= quantity of exports.)

Gross barter or commodity terms of trade in different time periods can be measured as follows:

$$Qm1/QX1 : qmo/qxo$$

(Here, qm1= index of quantity imported in the current year;

qx1=index of quantity exported in the current year;

qmo=index of quantity imported in the base year;

qxo= index of quantity exported in the base year.)

- **GROSS BARTER TERMS OF TRADE CRITICISM:**

Gross commodity terms of trade are criticized as under:

- According to Tausig, gross commodity terms of trade include unilateral transactions, like donation, gifts, etc. In balance of payments, but it is not proper because it does not represent the natural flow of trade.
- Gross commodity terms of trade do not provide any clue of payment of capital and its effect.
- Like net commodity terms of trade, gross commodity terms of trade also do not attach any importance to changes in the quality of goods.

3) INCOME TERMS OF TRADE

The income terms of trade are the ratio of index of the prices of exports and index of prices of imports.

$$Ty = tcqx = pxqx/pm \ (tc = px/pm)$$

(Here, ty=income terms of trade;

tc= commodity terms of trade;

px= index of prices of exports;

qx=index of quantity exported;

pm=index of prices imports.)

Income terms of trade are also called capacity to import. It is so because, in the long-run, the value of total export of a country is equal to the value of its total imports.

$$Pxqx = pmqm \ (pxqx/pm = qm) \ [qm = \text{quantity of imports}]$$

- **INCOME TERMS OF TRADE CRITICISM:**

Main criticism of income terms of trade is as follows:

- Concept of income terms of trade does not throw any light on the profits and losses of international trade.
- Concept of income terms of trade is a narrow concept. Index of income terms of trade relates to the capacity of imports as being dependent only on exports.

4) SINGLE FACTORIAL TERMS OF TRADE

Factorial terms of trade depend upon the productive efficiency of the factors of production. The single factorial terms of trade, commodity terms of trade are multiplied by the index of export productivity.

$$Ts = tc \times fx = px/pm \times fx \ (tc = px/pm)$$

CRITICISM:

According to critics, the greatest shortcoming of single factorial terms of trade is that it does not take into consideration potential domestic cost of production of input industries of importing country.

5) TWO FACTORIAL TERMS OF TRADE

♣ Double factorial terms of trade take into account the productivity of the factors of production in the country's exports as well as the productivity of the foreign factors of production used in country's imports.

Td= tc x fx/fm = px/pm x fx/fm (td= px/pm)

(Here, td=double factorial terms of trade;

tc= commodity terms of trade;

px= index of prices of exports;

fx=index of productivity of export goods industries;

pm=index of prices of imports;

fm= index of productivity of import goods industries.)

TWO FACTORIAL TERMS OF TRADE CRITICISM:

Main criticism of the concept of double factorial terms are as under:

I. It is very difficult to estimate the index of double factorials terms of trade of a country, because to do so it is necessary to measure the productivity of import goods produced in the country.

II. It is not possible to measure gains of international trade by this concept, because no importance is given to the utility of the goods exported and imported.

6) REAL COST TERMS OF TRADE

Import and export goods are compared according to their utility. Real cost of both imports and export is worked out. Real cost terms of trade are calculated by multiplying the single factorial terms of trade with the index of the amount of disutility per unit of productive resource used in producing exports.

Tr= ts x rx = px/pm x fxx rx

(Here, TR= real cost terms of trade;

ts= single factorial terms of trade;

px=index of export prices;

pm=index of import prices;

fx=index of productivity of export goods industries;

rx= sacrifice of utility inherent in export.)

CRITICISM:

Main defect of real cost terms of trade is that it is concerned only with the quantity of foreign goods obtained with the real costs inherent in exports.

7) UTILITY TERMS OF TRADE

Utility terms of trade is the index of relative utility of import and domestic commodities foregone to produce exports.

Tu= tr x u = px/pm x fx x rx x u

(Here, tu=utility terms of trade;

tr=real cost terms of trade;

px=index of export prices;

pm=index of import prices;

fx=export productivity;

rx= utility foregone to exports.)

CRITICISM:

It is an unrealistic concept. Utility and disutility cannot be measured precisely. Both concepts are subjective. This concept has no practical significance.

FACTORS INFLUENCING TERMS OF TRADE

1. Reciprocal demand:

(i) Elasticity of demand:

The following effect on terms of trade:

(a) Elasticity of demand of export goods: the demand of exports of a country is less elastic than terms of trade will be in its favour.

(b) Elasticity of demand of import goods: terms of trade will be favourable to a country whose demand for imports is more elastic. On the other hand, if the demand for imports is less elastic, terms of trade will be unfavourable.

(ii) Elasticity of supply:

Elasticity of supply has the following effect on terms of trade:

(a) The supply of export is less elastic terms of trade will be unfavourable and if more elastic the same will be favourable.

(b) Supply of imports is less elastic, terms of trade will be favourable and if supply of import is more elastic, terms of trade will be unfavourable

2. Size of demand:

With the increase in demand for the exports of a country, prices of export will increase as against the prices of imports and hence, terms of trade become favourable. If demand for imports increase, their prices will also increase as against the prices of export and so the term of trade become unfavorable.

- **SIGNIFICANCE OF TERMS OF TRADE**

Standard Of Living:

Changes in the prices of the items we have to import. Imported terms of trade might mean we are able to import cheaper food.

Prices Of Imported Technology:

Prices of imported technology affect relative prices of capital inputs needed to sustain growth. A weak exchange rate increases the price of import, worsens the terms of trade and makes imports of new technology more expensive.

Balance Of Payments:

Export and import prices affect the value of trade flows.

- **TERMS OF TRADE TRENDS AND ECONOMIC GROWTH**

- The most common view is that the terms of trade have a positive impact on economic growth.
- An increase in export prices relative to import prices allows a larger volume of imports to be purchased with a given volume of exports.
- The implied increase in the real purchasing power of domestic production is equivalent to a transfer of income from the rest of the world and can have large impacts on consumption, savings and investment.
- The terms of trade can also be thought of as a rate of return on investment and therefore a secular improvement in the terms of trade leads to an increase in investment and hence economic growth.
- Changes in the terms of trade can have different macroeconomic impacts depending on the composition of the relative price movements.
- If a fall (rise) in the terms of trade is due to a decrease (increase) in export prices, then this will initially impact on exporters before indirectly affecting households.
- However, if a fall (rise) in the terms of trade is a result of an increase (decrease) in import prices (for example, oil prices), this is likely to affect households and businesses more directly and the macroeconomic shock will be different.

LIMITATIONS

- Terms of trade should not be used as synonymous with social welfare, or even pareto economic welfare.
- Terms of trade calculations do not tell us about the volume of the countries' exports, only relative changes between countries.
- This may not necessarily mean an improved standard of living for the country.
- Terms of trade calculations can get very complex.

Main reasons for unfavourable and declining terms of trade of less developed countries

The following are the main reasons for unfavourable and declining terms of trade of less developed countries:

1. Prebisch's Arguments:

- Prebisch has given the following arguments explaining the declining tendency of terms of trade of the less developed countries.

(i) Nature of Product:

- The less developed countries are mainly primary producing countries. Their exports mostly include primary products and their imports include capital goods. On the contrary, the developed countries produce and export manufactured goods.
- The terms of trade between the primary products and manufactured products are generally determined against the former and in favour of the latter.

(ii) Effect of Technical Progress **:**

- Prebisch has argued that industrial countries keep the whole benefit of their technical progress, whereas the primary producing countries transfer a part of the fruits from their own technical progress to the industrial nations.
- According to him, money incomes and prices have risen more rapidly than productivity in industrial countries, whereas in the primary producing countries, the gains in productivity have been distributed in the form of price reductions. This has led to the deterioration of terms of trade of the primary producing countries.

(iii) Different Market Conditions **:**

- Export prices in the industrial countries do not fall as a result of technical progress because (a) the manufacturers operate under monopolistic conditions in the product market; and (b) they do not operate under competitive conditions in the factor market, i.e., labour market is dominated by trade unions.
- Thus, the benefit of the improved technology is not transferred to the consumers in poor countries. The producers in the poor countries, on the other hand operate under competitive conditions both domestically and internationally.
- Thus, as a result of technical progress in these countries, prices fall and the benefits flow to the consumers in the rich countries.

(iv) Price Movements through Business Cycles**:**

- Prebisch attributes the contrasting behaviour of prices in the industrial and primary producing countries to the different movements of primary product prices and industrial prices over successive business cycles.
- The prices of primary products have risen sharply in the prosperous periods and have fallen in the downswing of the business cycle.
- In contrast, although manufacturing prices have risen in the upswing of the cycle, these have not fallen so much in the depression because of the rigidity of industrial wages and price inflexibility due to monopolistic conditions.

- Thus, over successive cycles, the gap between the prices of the two groups of commodities has widened, and the primary producing countries have suffered an unfavourable movement in their terms of trade.

***(v) Disparity in Demand* :**

- Declining terms of trade of the less developed countries is also due to long-term disparity in the demand for manufactures and primary products.
- In the industrial countries, the income elasticity of demand for primary products is inelastic (i.e., less than one), while in the poor countries, the income elasticity of demand for manufactured goods is more elastic (exceeds one).
- This is because of two reasons: (a) Due to the operation of Engel's law, as incomes rise, the proportion of expenditure on food declines.
- Thus, the demand for food increases less rapidly than the rise in income, (b) The demand for raw materials is restricted by competition from synthetic or man-made substitutes.

2. Other Reasons:

- Some other causes of adverse terms of trade of the less developed countries are as follows:

(i) Backward Technology:

- The less developed countries use backward technology as compared to the developed countries. As a result, their relative productivity is low, cost ratios are high, and price structure is also relatively high. This leads to the adverse terms of trade for the poor country, placing it at a disadvantageous bargaining position.

(ii) High Population Growth

- Most of the less developed countries experience overpopulation and high population growth. As a result, there is high internal demand for the goods and low exportable surplus. Moreover, the import demand of these countries is highly inelastic. This causes their terms of trade to fall.

***(iii) Lack of Import Substitutes*:**

- Poor countries are greatly dependant on the advanced countries for their imports and have not developed import substitutes. On the other hand, the advanced countries are not so much dependant on the poor countries because they are capable of producing import substitutes. Thus, the poor countries have weak bargaining position in the international trade.

***(iv) Lack of Adaptability* :**

- Unlike, the advanced countries, the less developed countries cannot quickly adapt their supply of goods which are high in demand and whose prices arc rising. The reasons for this are: backward technology, market imperfections, immobility of factors of production, etc.
- Thus, the terms of trade of less developed countries tend to deteriorate and these countries fail to reap gains by increasing their supplies of exports during inflation.