

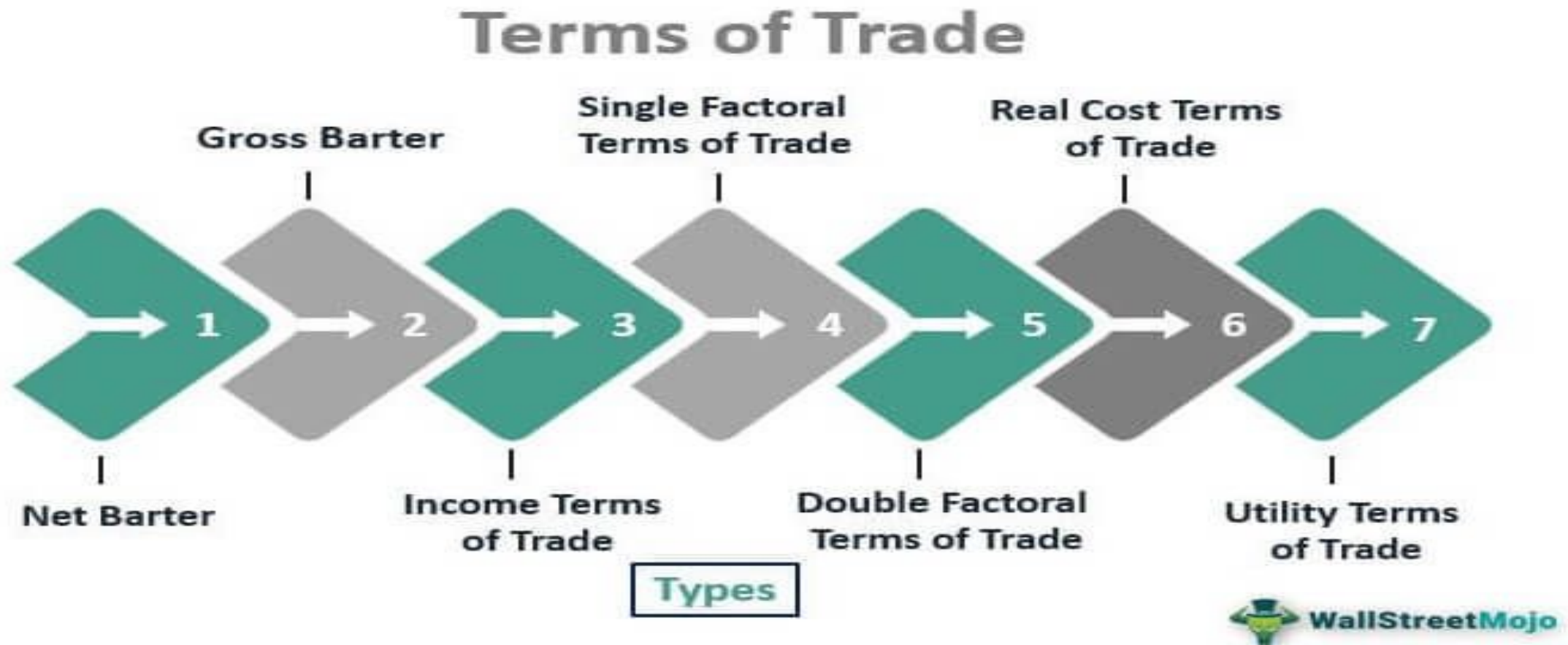
TERMS OF TRADE

ToT

# Meaning of TOT

- TOT is expressed as a ratio that reflects the number of units of exports that are needed to buy a single unit of imports.
- Or it is expressed as the ratio between the export prices to the Import prices

# Types of Terms of Trade(TOT)



# **Types of Terms of Trade: Classified by G.M Myer under 3 broad groups**

- **A. TOT related to the ratio of exchange between commodities**

- 1. Net Barter ToT (NBTT)
- 2. Gross Barter ToT (GBTT)
- 3. Income TOT (ITT)

- B. TOT relating to the interchange between productive resources**

- 1. Single Factoral TOT(SFTT)
- 2. Double Factoral TOT(DFTT)

- C. TOT that expresses the gains from trade in terms of Utility Analysis**

- 1. Real Cost TOT (RCTT)
- 2. Utility TOT (UTT)

# Net Barter ToT : NBTT >> was introduced by **F W Taussig**.

- It is the ratio between the export Prices and the Import Prices
- >> Also called the **Commodity TOT by Jacob Viner**
- Symbolically,  $NBTT = P_x / P_m$
- $P_x$  = price index of exports
- $P_m$  = price index of imports
- If  $P_x > P_m$  ===== favourable TOT
- If  $P_x < P_m$  ===== unfavourable TOT

# To measure the Changes in the NBTT

- The base year price indices of exports and imports will always be 100.  
i.e.,  $P_{x0} / P_{m0} = 100 / 100 = 1$

## Question:

- Q1. If the current price index of export is 160 and the current price index of imports is 120, find the Net barter terms of Trade between them and also interpret your result.
- Q2. If the current price index of export in 2020 is 225 and the current price index of imports is 180, find the Net barter terms of Trade between them if the base year (2010) price indices of exports and imports are 100. also interpret your result.

This implies :

- if the export prices rises faster than its import prices , then the NBTT is favourable
- and
- if the import prices rises faster than its export prices , then the NBTT will be unfavourable.



**Does an improvement in the NBTT increases the economic welfare of a country?**

- The sale of home produced goods at higher export prices and the purchase of foreign produced goods at lower prices is expected to increase welfare.
- This implies maximisation of NBTT will mean the maximisation of welfare.
- But that is not necessarily true.

Say >>

- >>The export function of a country is more elastic. Here a rise in export price will cause considerable reduction in the quantity of export and bring about a significant fall in the export earnings.
- >>Similarly, if the import function is more elastic, a fall in import price will cause a very substantial increase in quantity imported and also an increase in the spending on import.
- So, has the NBTT increased or Decreased?**
- And has the welfare increased?**

Ans. NBTT has increased But Welfare has decreased

- A fall in export earning coupled with an increase in import spending will mean a decline in welfare, even though the commodity terms of trade are favourable.

# A country should optimise NBTT and not Maximise

- >> So Haberler suggested that a country should try to optimise the terms of trade rather than maximize the terms of trade.
- The terms of trade get optimised at such levels of export and import prices where the export earning is maximum, while the import spending is the least possible.
- Thus optimum level of NBTT will be consistent with the maximisation of welfare.

# Criticisms of NBTT:

- **(i) Problems in the Construction of Index Numbers:** This concept involves the use of index numbers of export and import prices. The construction of index numbers is beset with several problems related to the choice of commodities, obtaining of price quotations, choice of base year, use of appropriate weights and the method for computing index numbers.
- **(ii) Neglect of Qualitative Changes:**
  - It neglects the qualitative changes in output in the two trading countries during a given period. In such a situation, net barter terms of trade cannot measure exactly the changes in welfare due to foreign trade in general and terms of trade in particular.

### (iii) It is sometimes misleading:

- If the export price index of a country falls, the import price index remaining the same, there is worsening of the NBTT.
- As export prices are lower than the import prices, the country will be able to get a smaller quantity of import in exchange of the goods exported. So NBTT would imply that the economic position of the country has deteriorated.
- But if the fall in export prices has resulted from a fall in costs of production of the export goods, the NBTT will be misleading.

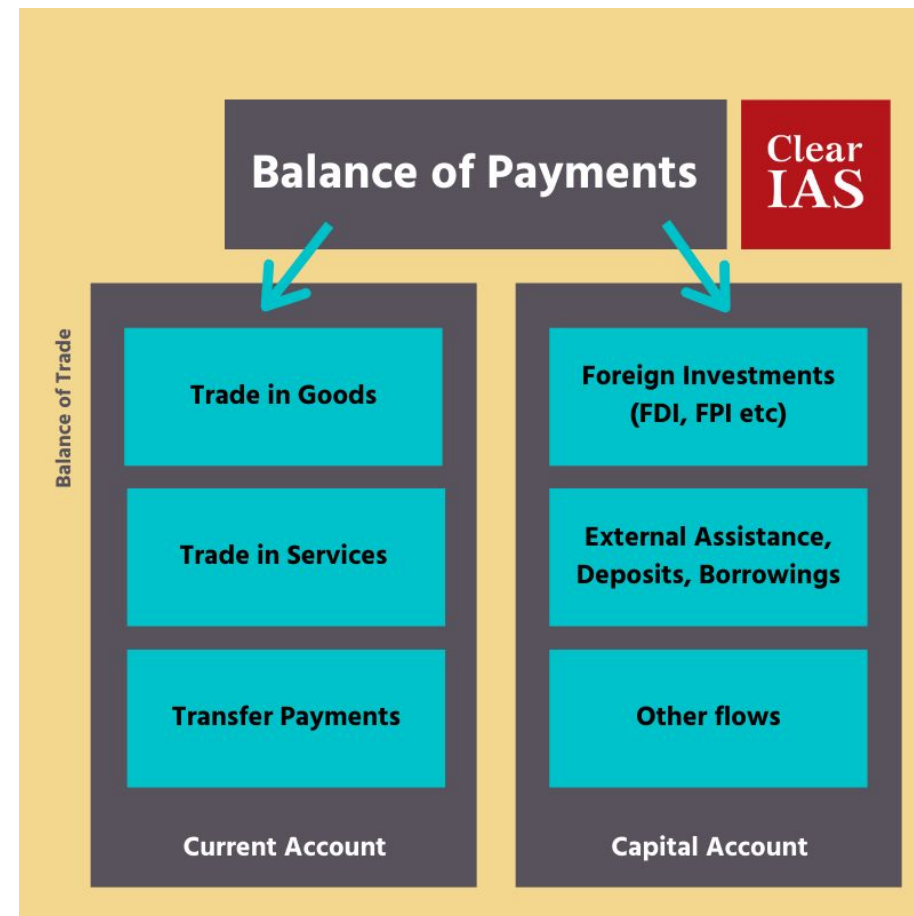
## **(iv) Neglected the Period of Time involved :**

The NBTT measures the relative change between the current year and the base year.

If this time interval is too short, there may not be any significant change in the TOT. On the contrary, if this duration is too long, there is the possibility of some major changes in the structure of production and demand in the countries such that comparisons on the basis of export and import prices are rendered irrelevant.

## (v) Faulty Index of Gain from Trade:

- It is often claimed that the NBTT provide an index of gains from trade for a country. But this will be so only if the balance of payments of the country included only the receipts and payments on account of exchange of goods and services.
- However because balance of payments of a country also includes the capital transactions and unilateral transfers, the gain from trade cannot be determined through the ratio of export and import prices.





## (vi) Neglect of Factors Affecting Prices:

- The net barter terms of trade absolutely neglects the factors, which cause variation in these prices. The export and import prices are affected by changes in productivity, costs, wages, general business conditions and reciprocal demand in the trading countries. Any conclusion concerning the economic position of a country exclusively on the basis of commodity terms of trade cannot be valid.

## • (vii) Capacity to Import:

- This measure cannot give any definite conclusion about the capacity of a country to import. To overcome the deficiencies of the net barter terms of trade, Taussig introduced the concept of gross barter terms of trade.

## 2. Gross Barter ToT: GBTT

- Given by Prof. Taussig
- It related the Quantities of the exports and imports and not their prices
- $GBTT = Q_m / Q_x$
- $Q_m$  = total quantity of imports
- $Q_x$  = total quantity of exports
- If  $Q_m > Q_x$  ===== Favourable TOT
- If  $Q_m < Q_x$  ===== Unfavourable TOT

## Questions:

- Q1. Given the quantity indices of imports and exports as 100 in the base year 2010 and 184 and 230 respectively in the current year 2020., find the Gross barter TOT and say if it is favourable or unfavourable for the country.
- Q2. If  $QM1 = 180$  and  $QX1 = 150$  , find the gross barter TOT and interpret the result.

# Criticisms of Gross Barter TOT

- **1. . Aggregating Goods, Services and Capital Transactions:**
- The concept of gross barter terms of trade has been criticised for lumping together all types of goods and capital payments and receipts as one category in the index numbers of exports and imports.
- No units are applicable equally to rice and to steel, or to export (or import) of capital and the payment (or receipt) of a grant. It is therefore, not possible to distinguish between the various types of transactions which are lumped together in the index.
- So it was criticised by many economists like Haberler, Viner etc as unreal and impracticable .

## 2. Ignores Factor Productivity:

- This concept ignores the effect of improvement in factor productivity on the terms of trade of a country. A country may have unfavourable gross barter terms of trade due to increase in factor productivity in the export sector. This increased factor productivity, in turn, reflects the gain for the exporting country.
- 3. Neglects Balance of Payments:
- The concept of gross barter terms of trade relates to the trade balance and ignores the influence of international capital receipts and payments of a trading country.

#### 4. Not True Index of Welfare:

- An improvement in gross barter terms of trade is regarded as an index of a higher level of welfare from trade. For the country exchanges more importable goods for its exportable goods. But this may not be true if tastes, preferences and habits of the people change so that the country needs less importables which yield greater satisfaction to the people. It will lead to unfavourable gross barter terms of trade but improve welfare.

#### 5. Ignores Improvements in Production:

- This concept measures the terms of trade in terms of physical quantities of exports and imports but ignores qualitative improvements in the production of exportable and importable goods.

# to continue

- to continue .....part 2
- Terms of Trade

- THANK YOU