Comparative Advantage Theory

- In 1817, Ricardo published his *On the Principles of Political Economy and Taxation*, in which he presented the law of comparative advantage.

- It argues that even if one country is more efficient (has an absolute advantage) in producing all goods compared to another country, both countries can still benefit from trade by focusing on producing the goods they can produce with the lowest cost.

- The first nation should specialize in the production and export of the commodity in which it has *comparative advantage (* absolute advantage is greater) and import the commodity in which it has *comparative disadvantage* (absolute advantage is smaller).

- Example: -
- Imagine two countries, Country A and Country B, producing two goods: wheat and cloth.
- **Costs:**
  - In Country A, it takes 5 units of labor to produce 1 unit of wheat and 10 units of labor to produce 1 unit of cloth.
  - In Country B, it takes 3 units of labor to produce 1 unit of wheat and 5 units of labor to produce 1 unit of cloth.

- **Comparative Advantage:**
  - Country A has a comparative advantage in producing cloth (lower opportunity cost of cloth production).
  - Country B has a comparative advantage in producing wheat (lower opportunity cost of wheat production).

Absolute Advantage

Hours of Labour necessary to produce one unit of Wheat and Cloth

Country	Wheat	Cloth	Domestic Exchange Rate
India	$40W_I$	$80C_I$	$1W_I = 0.5C_I$
England	$80W_E$	$40C_E$	$1W_I = 2C_I$

Comparative Advantage

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Country	Wheat	Cloth	Domestic Exchange Rate
India	$40W_I$	$80C_I$	$1W_I = 0.5C_I$
England	$90W_E$	$100C_E$	$1W_I = 0.9C_I$

Explanation: -

- India needs 40 hours of Labour to produce one unit of Wheat and 80 hours of Labour to produce One unit of Cloth. Domestic Exchange rate in India: 1 wheat = 0.5 Cloth
- England needs 90 hours of Labour to produce one unit of Wheat and 100 hours of Labour to produce One unit of Cloth. Domestic Exchange rate in India: 1 wheat = 0.9 Cloth

Compare the Cost: -

$$\frac{W_I}{C_I} < \frac{W_E}{C_E}$$

$$\frac{40W_I}{80C_I} < \frac{90W_E}{100C_E}$$

$$0.5 < 0.9$$

- India Wants more than 0.5 units of Cloth for one units of Wheat.
- England in ready to give less than 0.9 unit of Cloth for one Units of Wheat.
- So, India should specialized in Wheat and export to England and England should specialize in Cloth and export to India.

Overall Reeducation in Production Cost

- Before Tarde India require 120 (40 + 80) Labour hours to produce One unit of Wheat and Cloth each. And England Require 190 (100 + 90) labour hours to produce One unit of Wheat and Cloth each. So it requires 310 hours of Labour to product total four units.
- After Trade, India produce two unit of Wheat with 80 (40 + 40) hours of labour and England produce two unit of Cloth with 200 (100 + 100) hours of labour. So it requires 280 hours of Labour to product total four units.
- Overall reduction in Production cost by 30 labour Hours due to International Trade.
- Comparative Cost Theory give range of in which trade take place.
- Actual term of Trade determine in between the two limit

Assumption

- **Two Countries and Two Goods:** The theory often simplifies the analysis by considering only two countries and two goods.
- **Constant Costs:** The average cost of producing a good remains constant as the quantity produced changes.
- **Perfect Competition:** The theory assumes perfect competition in both domestic and international markets.
- **Full Employment & Immobility of Resources:** The theory assumes that all resources, especially labour, are fully employed in both countries.
- **No Transportation Costs or Barriers:** The theory assumes that there are no transportation costs, tariffs, or other barriers to trade between the two countries.
- **No Externalities:** Externalities, which are unintended side effects of economic activities, are not considered in the basic theory.
- **Static Analysis:** The theory is often presented as a static analysis, not accounting for changes over time such as technological advancements, shifts in resource availability, or changes in consumer preferences.
- **No trade Barrier**: - Trade are free from Government control

Benefits of Trade:

- Both countries end up with more wheat and cloth than they could produce on their own.
- Even though Country A is more efficient in producing both goods, both countries gain from trading based on their comparative advantages.

Implication: -

- The Comparative Cost Advantage Theory provides insights into how countries can benefit from international trade. It has influenced trade policies, global supply chains, and discussions on the distribution of labor and resources across countries.

Summary

- Even if one country is more efficient (has an absolute advantage) in producing all goods compared to another country, both countries can still benefit from trade.
- Country should specialize according to their Comparative advantage
- Trade leads to gain for both country and more output for the world.