School of Distance Education
University of Kerala,
Thiruvananthapuram

M.A. Economics
Semester-III
Course Code: EC 232

International Economics – I
Module – 1
Theories of International Trade
Unit – 1
Classical Theories of International Trade

Introduction

- International economics deals with how various countries across the globe interact with one another in the process of allocating scarce resources to satisfy human wants.

- International economics is often divided into two branches: (a) International trade theory and (b) International finance. International trade focuses on theories which explain why nations trade with each other.

- Various topics like balance of payments, exchange rate determination, international capital market etc. are included in international finance.

Internal trade and International Trade

- Internal trade or domestic trade is the exchange of goods and services among the residents of the same country. Only one currency is used as a medium of exchange in internal trade .
- There are much differences among countries in terms of natural resource endowments, climatic conditions, technological capabilities etc.
- This leads to substantial differences in prices of goods and services between countries. This is the most important cause of trade between nations.
- International trade refers to the exchange of goods and services between the residents of a given country and the rest of the world.

Physiocracy

- First school of thought in economics, originated in France during mid -18th century.
- The term physiocracy means ‘Rule of Law’.
- Francois Quesnay - considered as the uncrowned leader of writers who belong to this school.
- His most important contribution to Economics was the book ‘*Tableau economique*’ (1758) which describes the intertwined process of production, distribution, exchange and disposal of riches of a nation in terms of a scheme with two sectors of the economy (agriculture & manufacturing).
- There are three classes in the society: propertied class (landlords), productive class (farmers) and sterile class (artisans).
- According to physiocrats, wealth of a nation is entirely derived from agriculture.

Mercantilism

- Mercantilism refers to the collection of economic thought that came into existence in Europe during the period 1500- 1750.
- Mercantilists - group of men comprising of merchants, bankers, government officials, and even philosophers who wrote essays and pamphlets on international trade.
  - The doctrine of mercantilism was highly nationalistic and gave prime importance to the well - being of home nation.
  - According to mercantilist writers, regulation and planning of is essential for achieving the goals of the nation.
  - Mercantilists believed that the most important way in which nations could grow rich was by acquiring precious metals, especially gold.

Absolute Advantage Theory (Adam smith)

- Adam smith argued that as there is differences between countries in the cost of production of various commodities, trade is beneficial to both the trading partners.
- Adam Smith believed in labour theory of value and assumed that:(a) Labour is the only factor of production and it is homogeneous, (b) the cost or price of good depends exclusively upon the amount of labour required to produce it.
- According to Smith, trade between two nations is based on absolute advantage.

Commodity	**Country**	
	A	**B**
X	10	20
Y	20	10

- Assume that country A requires 10 units of labour to manufacture 1 unit of good X while Country B requires 20 units of labour for the same.
- Also assume that country A requires 20 units of labour to manufacture 1 unit of good Y while country B requires only 10 units of labour for the same.
- It is clear that A has an absolute advantage in the production of good X and B has an absolute advantage in the production of Y.
- Also assume that the two countries are exchanging 1 unit of good X for one unit of good Y.

- In such a situation only by spending 10 units of labour A can produce 1 unit of good X and it can be exchanged for 1 unit of good Y from B.
- Thus, A can save 10 units of labour which can be used for the production of another unit of X. By using 20 units of labour, A can produce 2 units of X. one unit can be used for self-consumption and the second unit can be exchanged for 1 unit of Y from B.
- If A is producing and consuming in isolation, it has to spend 30 units of labour to consume 1 unit of X and 1 unit of Y.

Comparative Advantage Theory (David Ricardo)

- Comparative Advantage theory is also known as comparative cost Theory.
- According to comparative advantage theory, even if one nation is less efficient (in other words, nation has an absolute disadvantage) than the other nation in the production of both commodities, there is still a basis for mutually beneficial trade.

- Comparative advantage theory advocates that each nation should specialise in the production and export of commodity in which its absolute disadvantage is smaller.

Country	**Commodity**	
	Wine	**Cloth**
Portugal	80	90
England	120	100

- Portugal is more efficient in making both cloth and wine because labour cost of production for each unit of these two commodities is less in Portugal than in England.
- So Portugal has an absolute advantage in the production of both these commodities.
- According to Ricardo, even in such a situation, mutually beneficial trade between England and Portugal is possible, as Portugal has a comparative advantage (greater absolute advantage) in wine and England has a comparative advantage (less absolute disadvantage) in wheat.
- From the hypothetical example, we can see that while England requires 120 units of labour to produce one unit of wine, Portugal requires only 80 units to produce the same.
- However, in the production of one unit of cloth, Portugal requires 90 units of labour while England requires 100 units of labour.

- Even though England has absolute disadvantage in the case of both goods, disadvantage is greater in the case of wine and lower in the cloth.
- So England has a comparative advantage (lesser absolute disadvantage) in the production of cloth.
- According to Ricardo, when England specialises in the production of cloth (commodity of its comparative advantage) and Portugal specialises in the production of wine (commodity of its comparative advantage), and exchanges these commodities in the international market, mutually beneficial trade is possible.

Comparative Advantage and Opportunity Cost

- Haberler explained the theory of comparative advantage on the basis of opportunity cost in 1936.
- Now let us use the concept of opportunity cost to explain the trade between England and Portugal.
- Opportunity cost of good X is the amount of another good Y that has been given up in order to produce an additional unit of good X.

Country	**Opportunity cost of production**	
	1 unit of wine	**1 unit of cloth**
Portugal	80/90 = 8/9	90/80 = 9/8
England	120/120 = 12/10	100/120 = 10/12

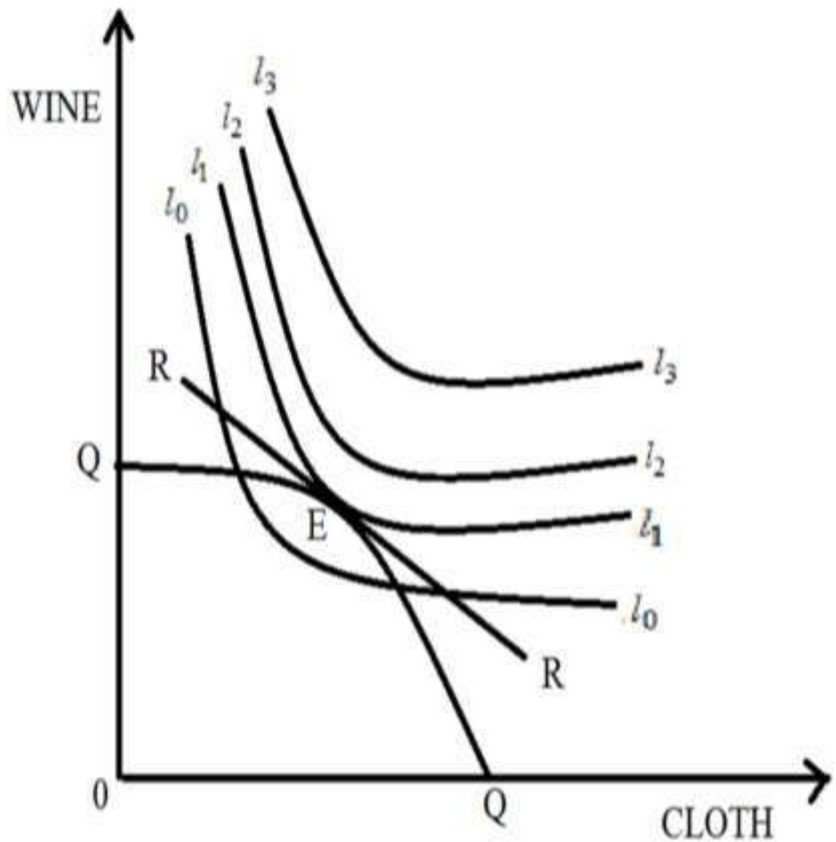
- A country has a comparative advantage in the production of a commodity if the opportunity cost of producing a good is lower at home than in another country.
- Portugal has lower opportunity cost in the production of wine in comparison with England while England has lower opportunity cost in the production of cloth.
- This implies Portugal has a comparative advantage in the production of wine and England has a comparative advantage in the production of cloth.
- As long as countries differ in their opportunity costs, one country has a comparative advantage in the production of one good and the other country has a comparative advantage in the production of the other good.
- In such a situation two nations can engage in mutually beneficial trade even though one country has an absolute advantage in the case of both products.

Gains from Trade

- If England and Portugal are in producing and consuming in isolation (autarky), England requires 220 units of labour while Portugal requires 170 units of labour to produce and consume one unit of wine and one unit of cloth.
- When Portugal specialises in the production of wine and England specialises in the production of cloth and exchanges in the international market, by using only 160 units of labour Portugal can produce two units of wine.
- Of these two units, Portugal can use one unit of wine for self - consumption and the other unit can be exported to England in exchange for one unit of cloth.
- That is only by spending 160 units of labour, Portugal could consume one unit each of both the commodities and save 10 units of labour.
- Similarly, England can save 20 units of labour while specialising in the production of 2 units of cloth and exchanging it with Portugal at the international market.

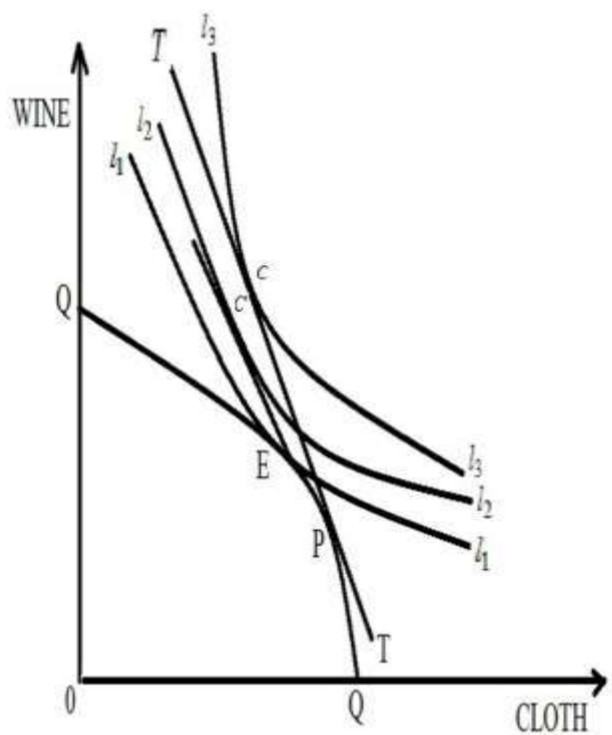
- If one unit of wine can exported from Portugal to England in exchange for something between 1.2 and 0.89 units of cloth, both countries will gain from trading.
- Thus, trade offers each country an opportunity to specialise in the production of the good in which it has comparative advantage and exchanging some portion of it for the good for which it has comparative disadvantage.
- In this way, both countries gain from trading.
- Gains from trade can be analysed by using concepts like production possibility curve and community indifference map.
- Production possibility curve (PPC) is the boundary of all combinations of two goods that the country can produce with given factor endowments and technical knowledge.
- The slope of the curve at any point shows the ratio of marginal costs of production (opportunity cost of production).
- Community indifference curve shows different combinations of two goods which yield the same level of satisfaction to the community as a whole.
- A set of community indifference curves shows community indifference map.

Equilibrium under Autarky



- Gains from trade can be explained by combining the supply side of the economy (PPC) with the demand side (community indifference curves).
- Under autarky equilibrium is reached at the point where the PPC is tangent to the highest possible Community Indifference Curve.
- At **E** the marginal rate of substitution (slope of the indifference curve) in consumption is equal to the opportunity cost (slope of the production possibility curve) in production.

Equilibrium under Free Trade



- International terms of trade is given by the price line TT which is tangent to the production possibility curve.
- The point of consumption is point C where indifference curve is tangent to TT. The society moves from Indifference curve I_1 to indifference curve I_3.
- This is the total gain from trade and we can see that total gain consists of two parts: gain from exchange and gain from specialisation.
- If the country does not change its production pattern and continue to produce at E, it could still gain from trade by exchanging cloth for wine at the international price ratio (shown by the movement of consumption point from E to C' on indifference curve $I_{2)}$.
- Increase in welfare associated with a movement from indifference curve I_1 to I_2 is known as gain from exchange.

- The economy can achieve further gains by increasing the production of the export good (cloth in our example) and reducing the production of import good. Movement from C' to C shows the gain from specialisation

Offer Curve

- Trade takes place with the interaction of the forces of demand and supply.

- This interaction can be explained on the basis of the concepts of reciprocal demand and offer curves. The idea of reciprocal demand was developed by J.S. Mill in 1948 in his book - The Principles of Political Economy.

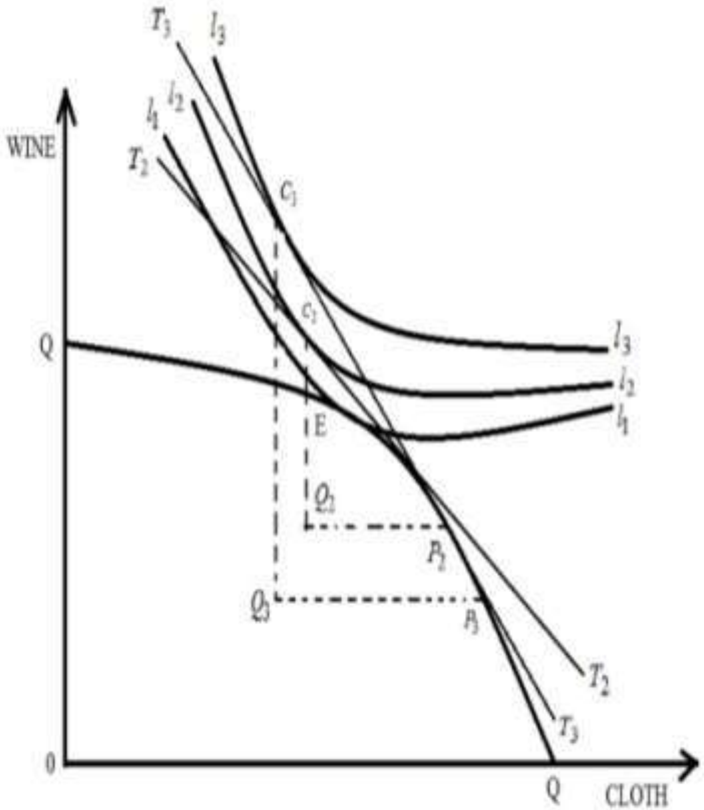
- According to him, the actual ratio at which commodities are transacted between two countries depends crucially upon the strength and elasticity of each country's demand for the product of the other or the reciprocal demand.

- By reciprocal demand, Mill meant the quantities of exports that a country would offer at different terms of trade, in return of varying quantities of imports.

- Thus reciprocal demand refers to the intensity of demand for the product of one country in the other country.

- The offer curve technique was later shaped by Edgeworth and Marshall to show how the terms of trade are determined by the interaction of demand and supply

Derivation of offer curves from production possibility curves



- Suppose there is a country A, which exports cloth the imports wine.
- Autarky equilibrium will be attained at point E. Country A will produce at point P_2 and consume at point C_2 on the indifference curve I_2 if it is able to trade at the international price ratio shown by T_2T_2.
- Here the nation will export O_2P_2 of cloth and import O_2C_2 of wine.
- An increase in the terms of trade is shown by a shift in the international price ratio of T_3T_3.
- Production is now shown by point P_3 whereby exports increase to O_3P_3.

- Consumption stands at C_3 denoting an increase to O_3C_3. $C_3$is at a higher indifference curve 1_3. The lines T_2T_2 and T_3T_3 denotes the terms of trade which can now be used to derive the offer curves.

Terms of Trade

- Terms of trade of a nation is defined as the ratio of the price of its export commodity to the price of its import commodity.

Gross Barter Terms of Trade (G B T T) - Taussing ,1927

- It makes use of the quantity index for exports and import and may be expressed as follows: $G = \frac{Mq}{Xq} X\ 100$

G	=	GBTT
M_q	=	Import quantity index
X_q	=	export quantity index.

- An increase in import quantity index would improve GBTT whereas an increase in export quantity index would deteriorate trade.

Net Barter /Commodity Terms of Trade.

- Use of the price index for exports and imports, the net barter or commodity terms of trade (N) may be written as follows:
- N = $\frac{Xp}{Mp} X\ 100$
- Xp = Prince index of exports
- Mp = Price index of imports.

Thank You