Virtual Learning Network

V-LRN
VIRTUAL LEARNING NETWORK

International Business Environment

Block - 1

Unit – 2

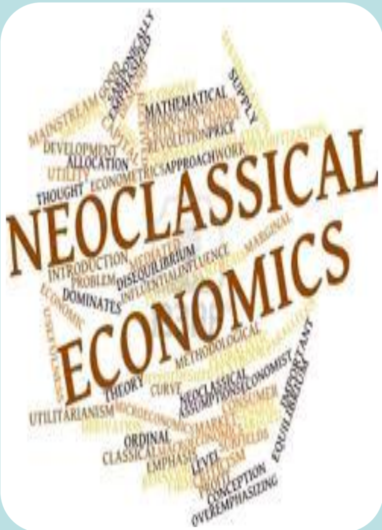
Theories of International Trade

Topics to be Covered

- Introduction
- Objectives of Trade Theories

- Ricardian Theory of Trade
    - Labor theory of Value
    - Autarky Equilibrium
    - Absolute advantage Vs Comparative advantage
    - Free trade and Gains from trade
    - Terms of trade

Topics to be Covered



The Neo-Classical Theory of Trade

- Assumption of Neo-classical Model
- New Trade Theory
- Heckscher-Ohlin-Samuelson (HOS) Theorem
- Factor Price Equalization Theorem
- Samuelson-Stolper Theorem

Modern Theories of Trade

Introduction

The argument in elementary theory is that trade will occur whenever it is profitable for two or more people to trade.

The purpose of the pure theory of international trade is to show why international trade exists and that it is beneficial.

Trade theories explain the pattern of trade between two countries, the pattern of specialization and the mutual benefit of the trade.

Introduction

International trade theory has set itself two slightly different and more precise goals:

- to show that trade is beneficial to the nation as a whole, not just to exporters and importers
- to show minimum conditions for the existence of trade.

Objectives of Trade Theories

- To explain the pattern of trade between two countries.
- To explain the pattern of specialization.
- To show that international trade is mutually beneficial to the trading country.

Ricardian Theory of Trade

The Ricardian model focuses on comparative advantage, which arises due to differences in technology or natural resources.

It states that a country has comparative advantage in the good in which its relative labor productivity is higher than its trading partner and tends to export this good.

Ricardian Theory of Trade

The Ricardian model is based on the following assumptions:

- Labor is the only primary input to production
- The relative ratios of labor at which the production of one good can be traded off for another differ between countries and governments

Ricardo's Attainments of Trade Theory

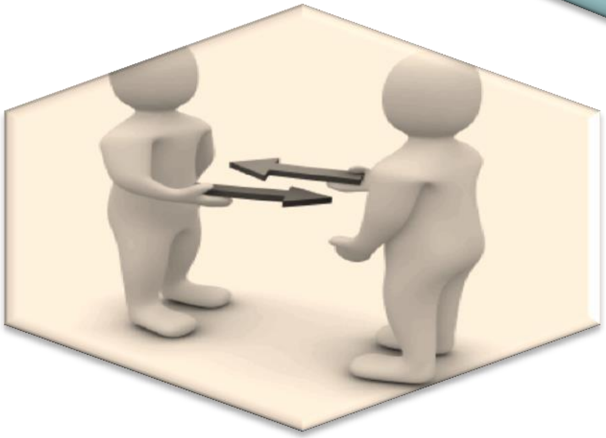
CONCLUSION

Trade between countries was not dominated by relative costs of production

By differences in internal price structures that reflected the comparative advantages of the trading countries and made exchange desirable.

Ricardo’s Attainments of Trade Theory

Ricardo differentiated *value in use* from *value in exchange.*



“Utility then is not the measure of exchangeable value, although it is absolutely essential to it.”

Ricardo's Attainments of Trade Theory

Ricardian Theory of Trade

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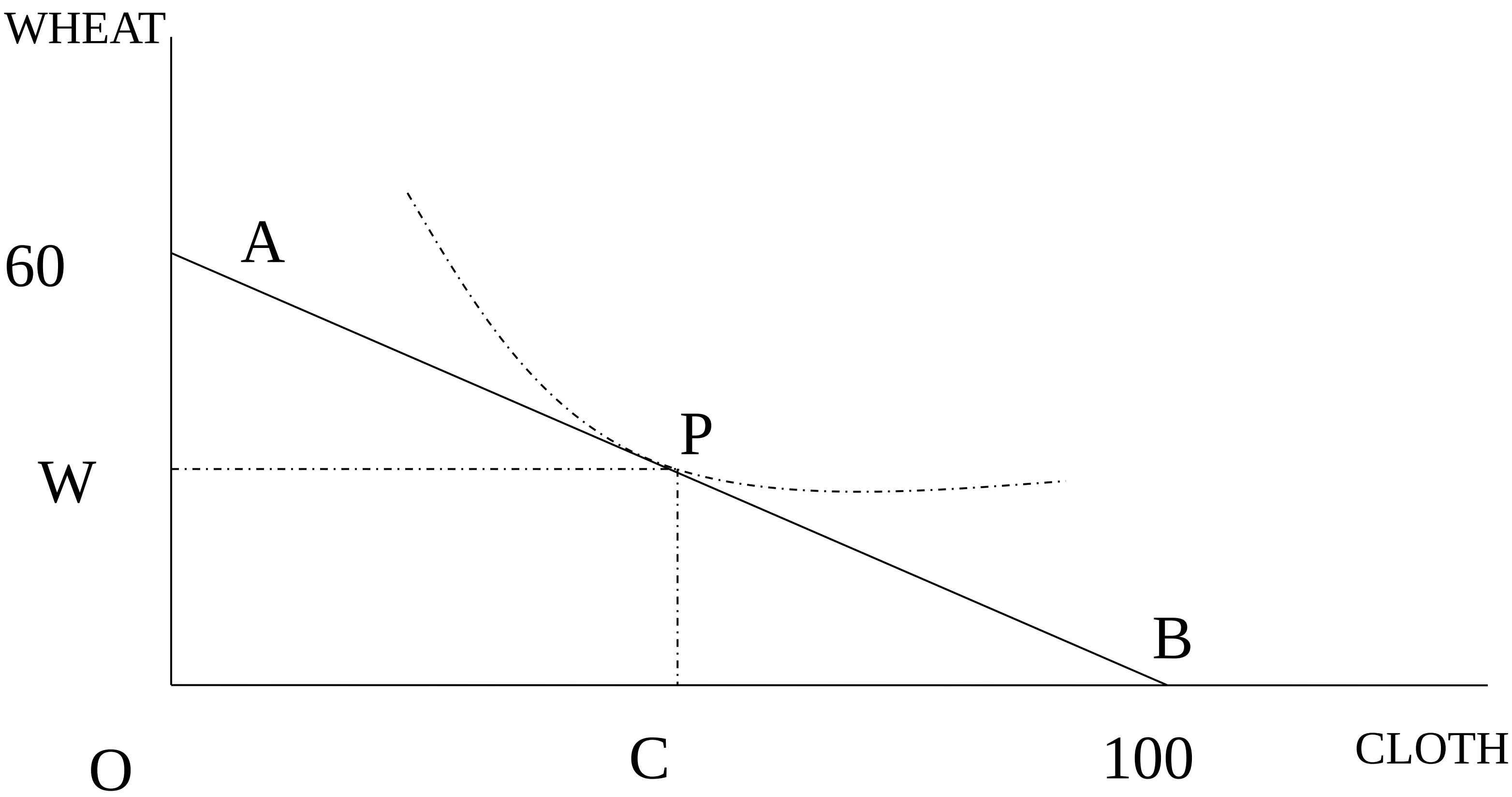
Labor theory of value

Labor theory of exchange value—	Depends on relative quantities of direct and indirect labor
	Translate this into money terms: relative labor and capital costs (wages and profits)
	Rent is price determined not price determining
	Problem of different labor to capital ratios—if these differ relative prices can be affected by changes in wage rates even if the quantities of labor and capital used remain the same

Labor theory of value

Production possibilities of wheat & cloth



Autarky Equilibrium

In it configuration of prices and quantities at which quantities supplied and demanded within the economy are equal.

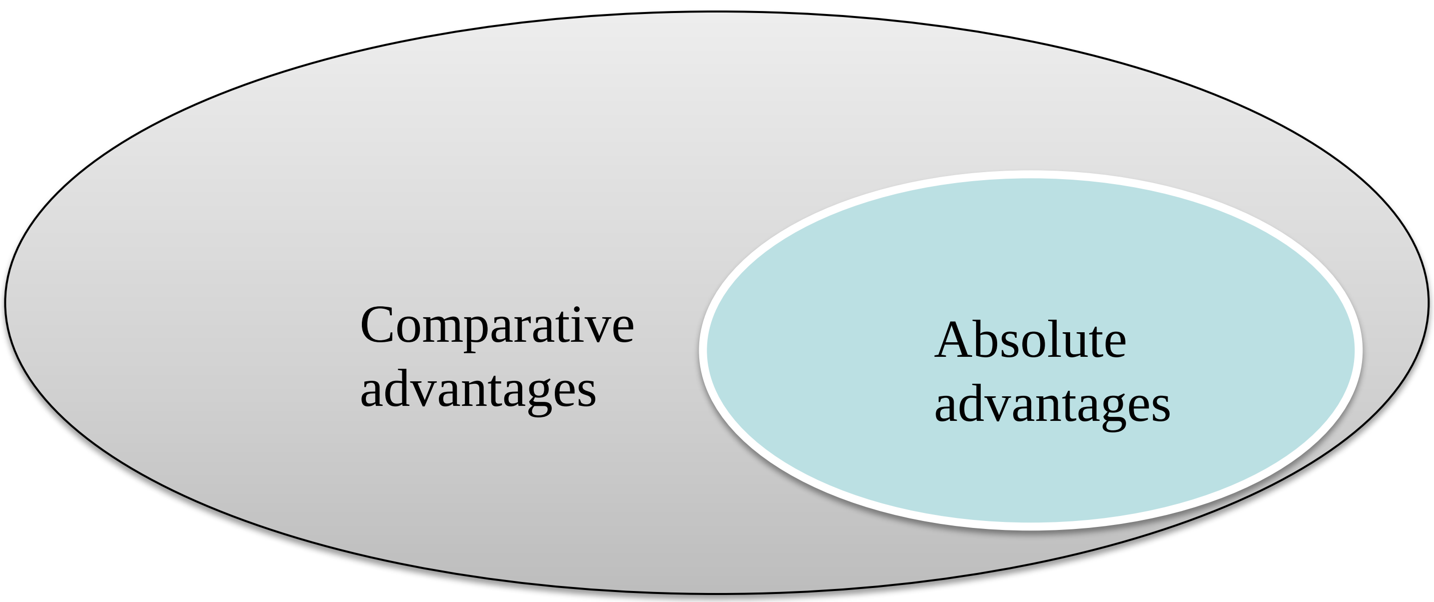
so that no trade would take place even if it were permitted.

In the absence of trade:

- producers will seek to maximize profits,
- consumers will seek to maximize utility.

Absolute Advantages & Comparative Advantages Theory

- The trade based on absolute advantages state that absolute advantages, in fact, are some special comparative advantages under the specific circumstances.



Free Trade Equilibrium

We start with two countries that differ in terms of relative productivity.

Country H is relatively more productive in the production of good 2 than country F

Home (H)

Foreign (F)

The opportunity cost of producing good 1 is lower for H (higher for F)

Specialization & Free Trade

2 potential gains from free trade

Gains from specialization : increases world production

Gains from trade : enables separation of production and demand decisions

Requires specialization in comparative advantage industry :

Home specializes in industry 2 and Foreign country in industry 1

Incentive come from terms of trade

Defect of Ricardian Model

- **Restrictive Model:** Ricardo's Theory is based on only two countries and only two commodities. But international trade is among many countries with many commodities.
- **Labor Theory of Value:** It has too many limitations and thus is not applicable to the reality. Value of goods and services in the real world is expressed in money i.e. the prices are the values expressed in units of money.
- **Full employment:** The assumption of full employment helps the theory to explain trade on the basis of comparative advantage. The reality is far from full employment.

Defect of Ricardian Model

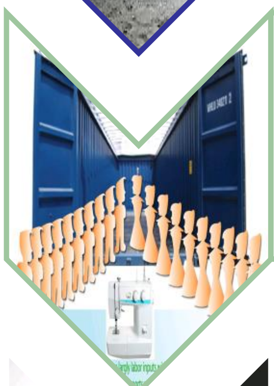
- **Demand is ignored:** The Ricardian theory concentrates on the supply of goods. Each country specializes in the production of the commodity based on its comparative advantage.
- **Mobility of factor of production:** As against the assumptions of perfect immobility between the countries, witness difficulties in the mobility of labor and capital within a country itself.
- **No Free Trade:** Theory assumes free trade. It is unrealistic to assume not to have any restriction. what the real world witnesses is a lot tariff and non-tariff barriers on international trade.

Defect of Ricardian Model

- **Complete specialization:** The comparative advantage theory comes to conclusion of complete specialization. In the production of less important commodity is not possible due to insufficient demand for it.
- **Constant Returns to Scale:** It assumes constant Returns to scale and thus constant cost of production in both the countries. If examine the pattern of international trade in practice, it is not so.

The Neoclassical Theory of Trade

- Neo-classical theory focuses on awards



- It assumes that there are at least two factors, say labor and capital which are used in the production of goods.

- But the two countries have the same technology or the same production functions.

Assumption of Neo-Classical Model

Perfect Competition

Constant returns to scale

One good is labor intensive and the other capital intensive and this status does not change.

Only goods move from one country to another, not factors

The countries have the same technologies to produce X & Y for their factors endowments differ.

The New Trade Theory

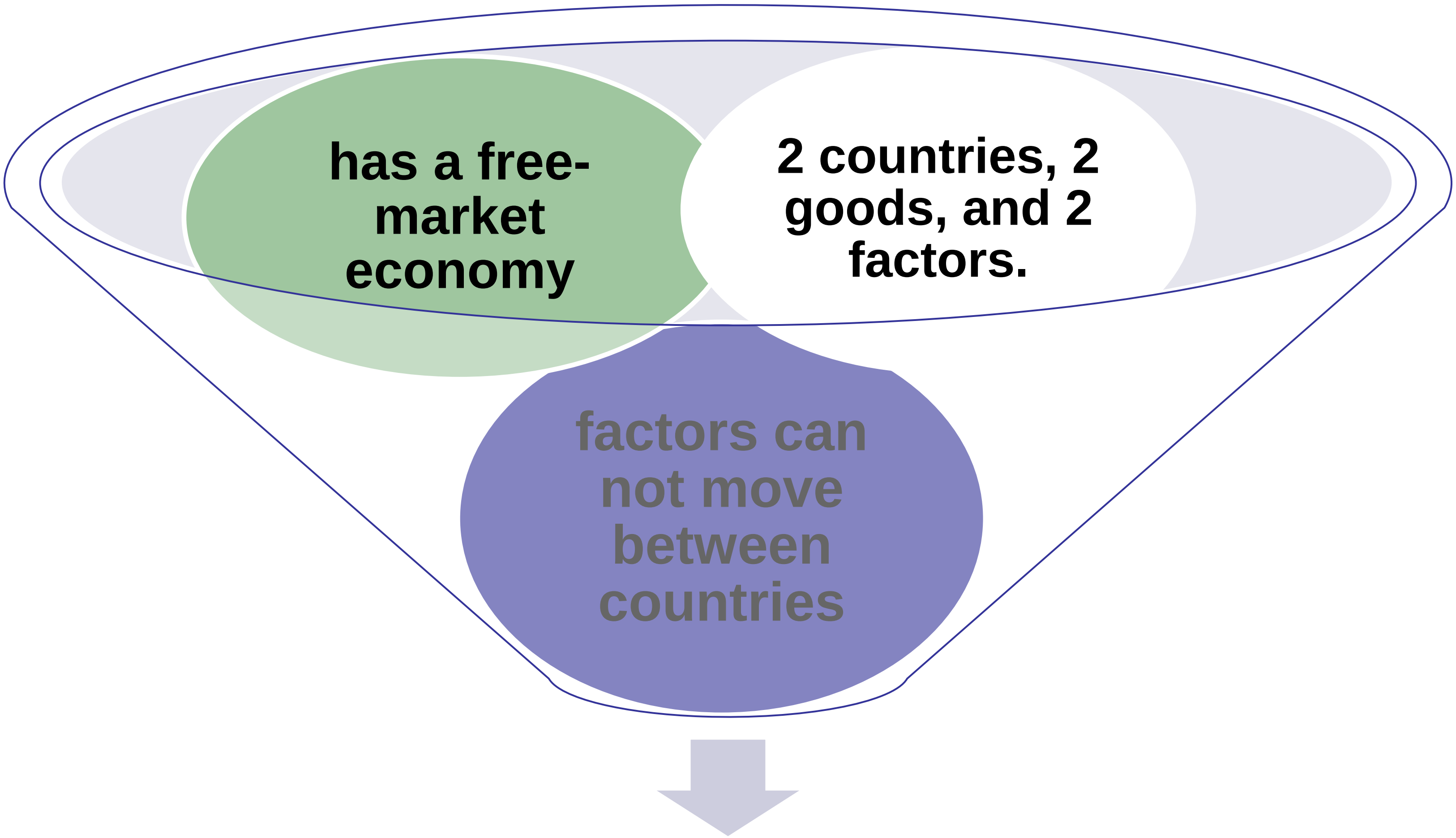
As output expands with specialization, an industry's ability to realize economies of scale increases and unit costs decrease

Because of scale economies, world demand supports only a few firms in such industries

Countries that had an early entrant to such an industry have an advantage:

- Fist-mover advantage
- Barrier to entry

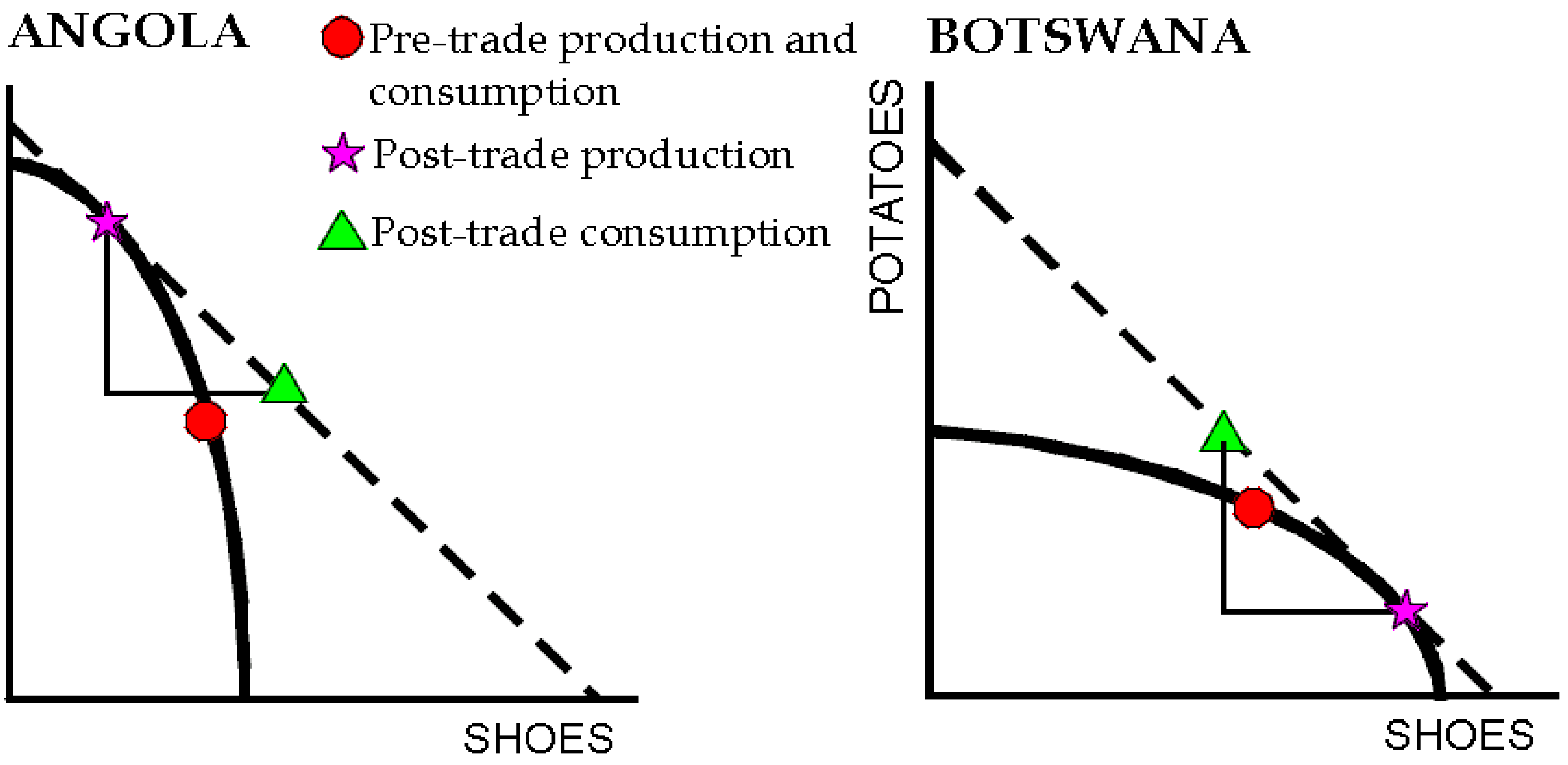
Heckscher-Ohlin-Samuelson (HOS) Theorem



HOS Theorem

Example

Production Possibility Frontiers for the two countries

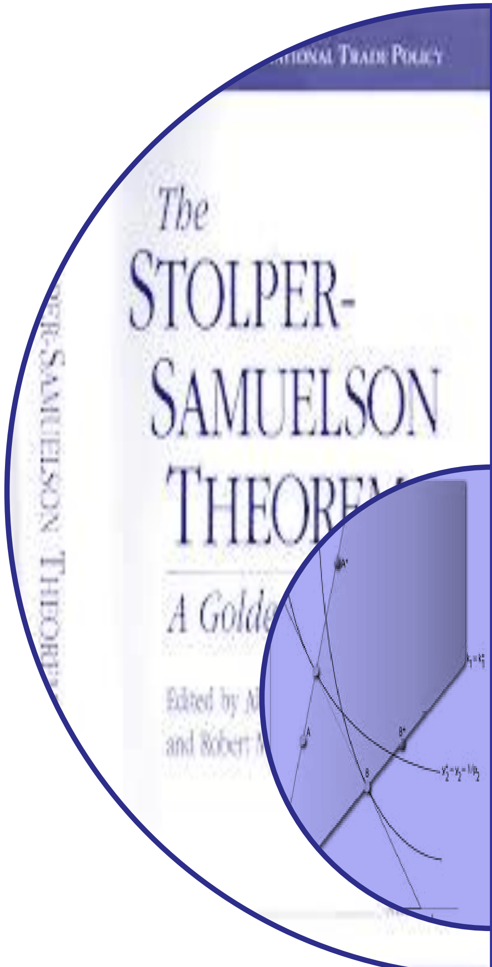


The H-O Theorem

Given identical production functions but different factor endowments between countries, a country will tend to export the commodity which is relatively intensive in her relatively abundant factor

In general, countries tend to have comparative advantage in the products that are relatively intensive in their relatively abundant factors

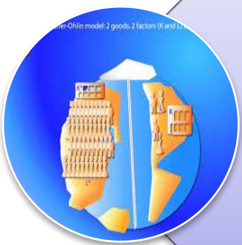
Introduction of Samuelson-Stolper Theorem



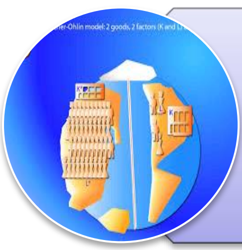
The Stolper-Samuelson theorem is one of the central results of Heckscher-Ohlin theory itself one of the principal theories of international trade. It provides a definite answer to a central question in applied economics:

what is the effect of changes in the prices of goods, caused for example by changes in tariffs, on the prices of factors of production?

Assumption of Samuelson-Stolper Theorem



It describes a relation between the relative prices of output goods and relative factor rewards, specifically, real wages and real returns to capital.



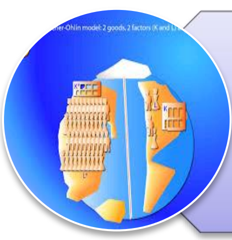
One country produces two goods with two factors of production

competition prevails;

Assumption of Samuelson-Stolper Theorem

both factors are fully employed

both factors are mobile between sectors (but not between countries);



one good (wheat) is capital-intensive and the other (cloth) is labor-intensive);

opening trade raises the relative price of the export good.

The Stolper-Samuelson Theorem

moving from no trade to

free trade

raises the returns to the factor used intensively in the rising-price industry,

The Stolper-Samuelson Theorem

Note: Not all factors used in the export industries will be better off, and not all factors used in import competing industry get spoil: abundant factors will benefit, while scarce ones will be hurt

- In addition, factors face **magnification effect**—the change in put prices has a magnified effect on incomes: 75% decline in the price of bread can lead to a more than 75% decline in the income of labor used in the production of bread

The Stolper-Samuelson Theorem

Ultimately, the effect of trade opening on income distribution depends on the flexibility of the affected factors

If labor is stuck in bread production and unable to move to making steel, it will be hurt much worse than when it is flexible and free to move

The Stolper-Samuelson Theorem

Assumptions:

there are two countries using two factors of production producing two products;

each factor supply is fixed, and there is no migration between countries;

each factor is fully employed in each country with or without trade;

The Stolper-Samuelson Theorem

production functions exhibit constant returns to scale, and are the same between countries for any industry;

competition prevails in all markets;

there are no transportation or information costs;

free trade;

production functions are not subject to factor intensity reversals; and

both countries produce both products with or without trade.

Factor Price Equalization Theorem

Free trade will equalize not only commodity prices but also factor prices,

so that all workers earn the same wage rate and all units of capital will earn the same rental return in both countries regardless of the factor supplies or the demand patterns in the two countries

Modern Theories Of Trade

In the modern theories the market structure is either monopolistic or oligopolistic.

The products which are just differentiated horizontally are similar in quality but different in design. Vertical product differentiation would invariably means that the technology varies with quality or type of product.

Summary

- Trade theories explain the pattern of trade between two countries, the pattern of specialization.
- Ricardian theory states that a country has comparative advantage in the good in which its relative labor productivity is higher than its trading partner and tends to export this good.

Summary

- **Heckscher-Ohlin-Samuelson** theorem emphasizes that a country which is relatively abundant in labor will have comparative advantage in the labour intensive good and the relatively capital abundant country will have comparative advantage in the capital intensive good.
- The modern theories of trade assumes monopolistic or oligopolistic market structure and economy of scale in production.

Thank you