Competitiveness Of The National Economies

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Lecture № 3

The theories of competitiveness

Part I

Outline

1. Introduction
2. The Theory of the Absolute Advantage
3. The Theory of the Comparative Advantage
4. The Theory of the Heckscher-Ohlin

Goal of this lecture:

- Giving a clear view to the main theories of the competitiveness
- Analyzing the Theory of Absolute Advantage
- Analyzing the Theory of Comparative Advantage
- Analyzing the Theory of Heckscher-Ohlin

Table 1. Selected concepts and theories related to competitiveness

Concept/Theory	Representative	Country	Main theses
1	2	3	4
Classical concepts and theories			
Concept of invisible hand	Adam Smith	Scotland	Each party involved in international free trade can gain benefits by specializing in the production of goods in which it holds an absolute advantage. So, let every country export those goods it produces at the lowest costs and import those goods it produces at the highest costs
Comparative advantage concept	David Ricardo	England	A country can benefit from foreign trade even if it lacks any absolute advantage over its trade partners in the goods' production. It only needs to have relative advantage in any good in order to sell it abroad
Heckscher-Ohlin trade theory (natural resource abundance theory)	Eli Heckscher Bertil Ohlin	Sweden	A country will specialize in producing and exporting those commodities which require relatively intensive use of locally abundant factors of production. Relatively capital- -abundant country will export capital-intensive commodities while relatively labour-abundant country will export labour-intensive commodities

Concept/Theory	Representative	Country	Main theses
1	2	3	4
Neoclassical, Austrian and institutional concepts and theories of competitiveness			
Theory of effective (workable) competition	John M. Clark	USA	Competitive advantage is driven by innovations introduced by the company. Innovations motivate firms to compete aggressively in order to obtain competitive advantage, which in turn leads to technological progress and economic growth at the macro-level
Theory of marketing behaviour	Wroe Alderson	USA	There are six potential sources of a firm's competitive advantage: market segmentation, a way of communication (i.e. promotion and advertising) and reaching out to the customers (choice of distribution channel), product development, process improvement, and product innovations
Austrian school theory	Ludwig von Mises	Austria	Market competition is an automatic dynamic process and not a specific market structure. The tendency towards market equilibrium is the result of entrepreneurial activity. An enterprise wins or loses in competition depending on the strength of its capabilities and the degree its offers match the market needs

Concept/Theory	Representative	Country	Main theses
1	2	3	4
Neoclassical, Austrian and institutional concepts and theories of competitiveness			
Evolutionary economics	Joseph A. Schumpeter	Austria	Crucial to long-term survival of firms in the marketplace is their constant adjustment to changing environment, mainly due to searching out new innovative recombination of the garnered resources
Theory of entrepreneurship and innovations	Joseph A. Schumpeter	Austria	The company's ability to innovate is a key for achieving competitive advantage over its rivals. The ability to create new solutions and the predisposition to take risks associated with testing them in the market underline the competition process and entrepreneurship. Differences both in the level of innovative capacity and entrepreneurship result in differences in the competitive position of any economic agent
Institutional economics streams	Friedrich List Max Weber James Buchanan	Germany USA	In addition to economic factors, one's competitiveness is affected by social institutions such as public authorities, trade unions, financial institutions, socio-political organizations, ownership and organizational structures and mental habits, rules and codes of conduct

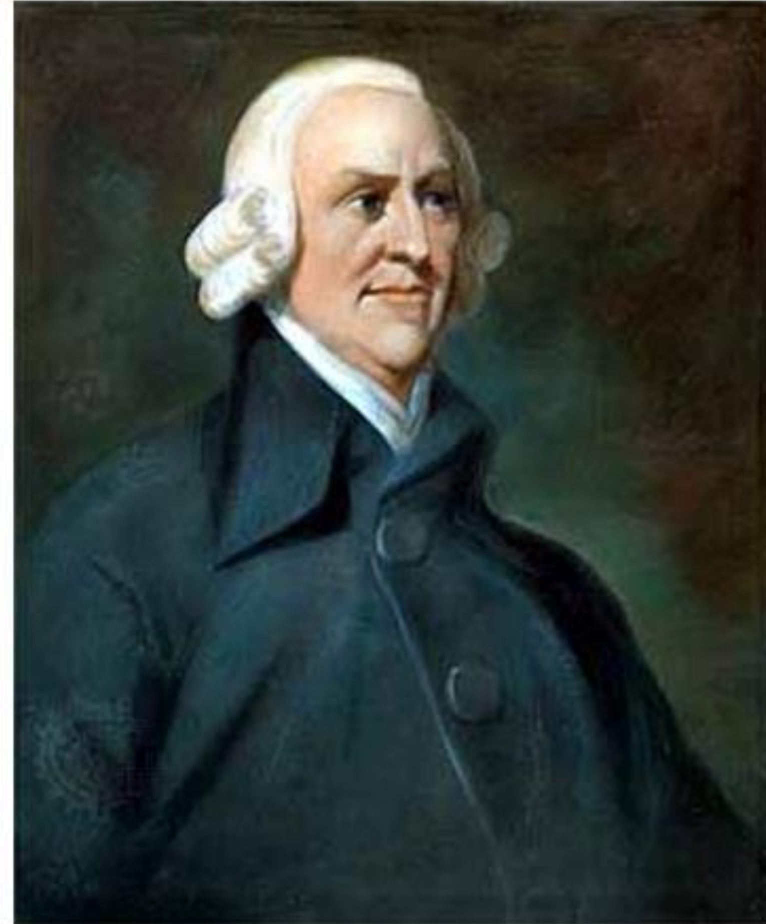
Concept/Theory	Representative	Country	Main theses
1	2	3	4
Contemporary concepts and theories of competitiveness			
Krugman's concept of competitiveness	Paul R. Krugman	USA	Productivity growth is the main driver of competitiveness. International competitiveness of countries is associated with their high standard of living
Porter's theory of competitiveness	Michael E. Porter	USA	Competitiveness depends on long run productivity, which increase requires a business environment that supports continual innovation in products, processes and management. The four underlining conditions driving the global competitiveness of country's companies include: factor endowments, demand conditions, related and supporting industries (clusters), and the firm's strategy, structure and rivalry

The classical approach focuses mainly on competitiveness at the macro-level (international, country, regional), whereas the neoclassical approach, respectively, on the micro- -level. The first attempt to explain the reasons why countries engage freely in international trade originates from Adam Smith's theory of absolute advantages developed in 1776. There are also numerous modern concepts and theories of competitiveness, which include, in particular, the views of Paul Krugman (New economic geography theory) and Michael Porter (management theory). The macro-level approaches to competitiveness very often refer to international trade and nations' comparative advantage in production of certain commodities which are the subject of foreign trade. There is also a set of theories and concepts directly addressing the relations between competitiveness and market structure (perfect competition, oligopoly, monopoly). These are the classic approaches in which competitive struggle in the market is an indicator of the competitive position of the individual players. Additionally, there are single competitiveness theories that advocate state intervention in the market. Most of the theories of competitiveness argue that the competitiveness position of any country, region and company is decided by its productivity being, on one hand, considered as a major determinant of competitiveness, and, on other hand, equated with competitiveness.

An inspiring approach to the competitiveness is offered by Joseph Schumpeter in his theories of the entrepreneur and innovation that state that merely the capability to create innovations and owner’s entrepreneurial activities determine the firm’s competitive advantage. The game theory of John von Neumann and Oskar Morgenstern also contributed to the development of competitiveness theory, paying emphasis on the market competition as a game playing. Under this original approach, when looking from the perspective of all players in the market, to behave rationally means to cooperate, whereas for the single players to be rational is to refrain from the cooperation

Adam Smith (1723-1790): The Pioneer

- Known as the "father of modern economics" and the "founder of capitalism"
- He outlined the characteristics and benefits of a complete economic system in his book "The Inquiry into the Name and Causes of the Wealth of Nations"
  - Recognized as the foundation of modern economic theory



What Is Smith's Theory Of Absolute Advantage?

- Adam Smith argued that a country has an **absolute advantage** in the production of a product when it is more efficient than any other country in producing it
  - countries should specialize in the production of goods for which they have an absolute advantage and then trade these goods for the goods produced by other countries

Absolute Advantage

Absolute advantage is the ability of a country, individual, company or region to produce a good or service at a lower cost per unit than another entity that produces the same good or service. Entities with absolute advantages can produce a product or service using a smaller number of inputs or a more efficient process than another entity producing the same product or service.

Absolute Advantage

- Export those goods and services for which a country is more productive than other countries.
- Import those goods and services for which other countries are more productive than it is.
- Country should concentrate on production of goods in which it holds an absolute advantage.
- Measures nations wealth by the standard of living of its people

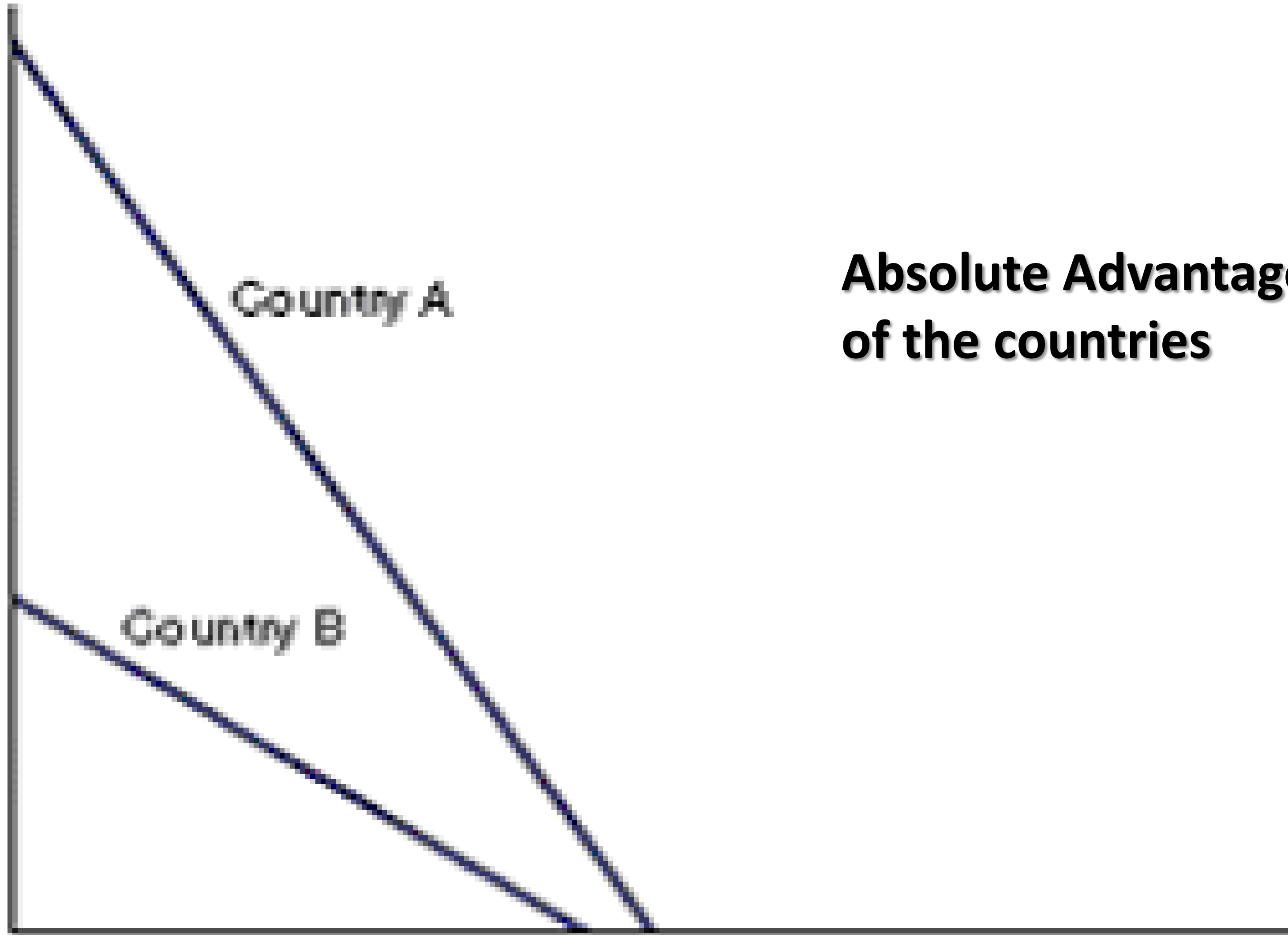
Absolute Advantage

A country has an absolute advantage in the production of a good when it can produce more of that good than another country with the same resources.

Suppose that by using x units of resources…

	Wine	Computers
France	70	2
US	50	3

The Frence has an absolute advantage in the production of wine



Absolute Advantage of the countries

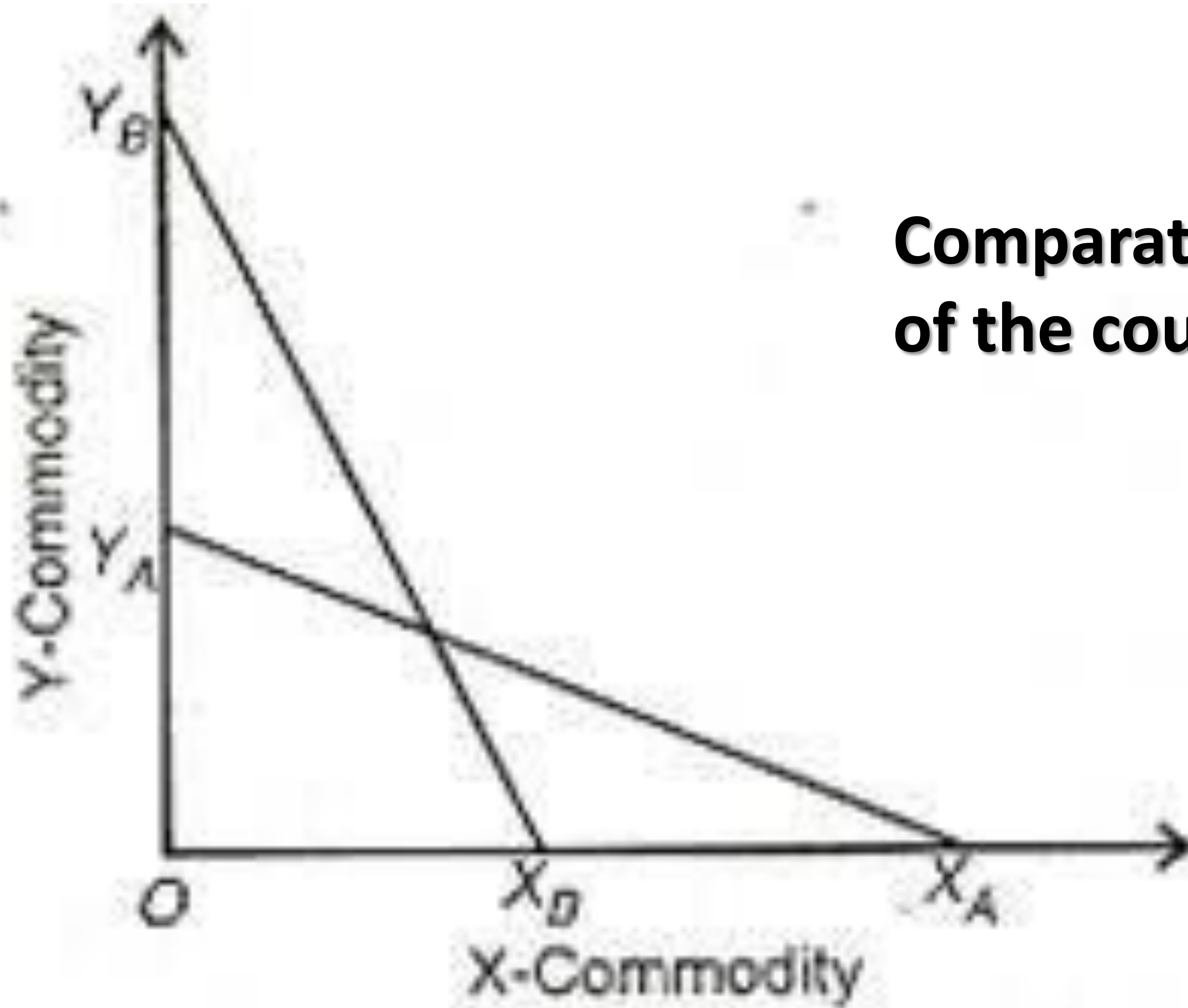
What Is Ricardo's Theory Of Comparative Advantage?

- David Ricardo asked what might happen when one country has an absolute advantage in the production of all goods
- Ricardo's theory of **comparative advantage** suggests that countries should specialize in the production of those goods they produce most efficiently and buy goods that they produce less efficiently from other countries, even if this means buying goods from other countries that they could produce more efficiently at home

David Ricardo

- Born in 1772
- At the age of 21, disinherited from family for marrying outside his family's Jewish faith
- Became a successful banker in London
- Made a fortune as a stock broker in London
- A Member of the Parliament of United Kingdoms
- The most popular economist after Adam Smith

- The ability to produce a good at a lower opportunity cost than another producer.
- Comparative advantage is a term associated with 19th Century English economist **David Ricardo**.
- Ricardo improved upon Smith's principle of absolute advantage.
- If each country **specializes** in those goods and services where they have an **advantage**, then total output and **economic welfare** can be increased (under certain assumptions).



Comparative Advantage of the countries

Ricardian Model – An Overview

- Illustrates the potential benefits from trade
- Trade leads to international specialization
- With labour as the only factor, it moves from relatively less efficient industries to relatively more efficient industries

<u>Gains from Trade</u>

(a) International trade brings in efficiency in production and consumption, and

(b) It provides a market for goods and services

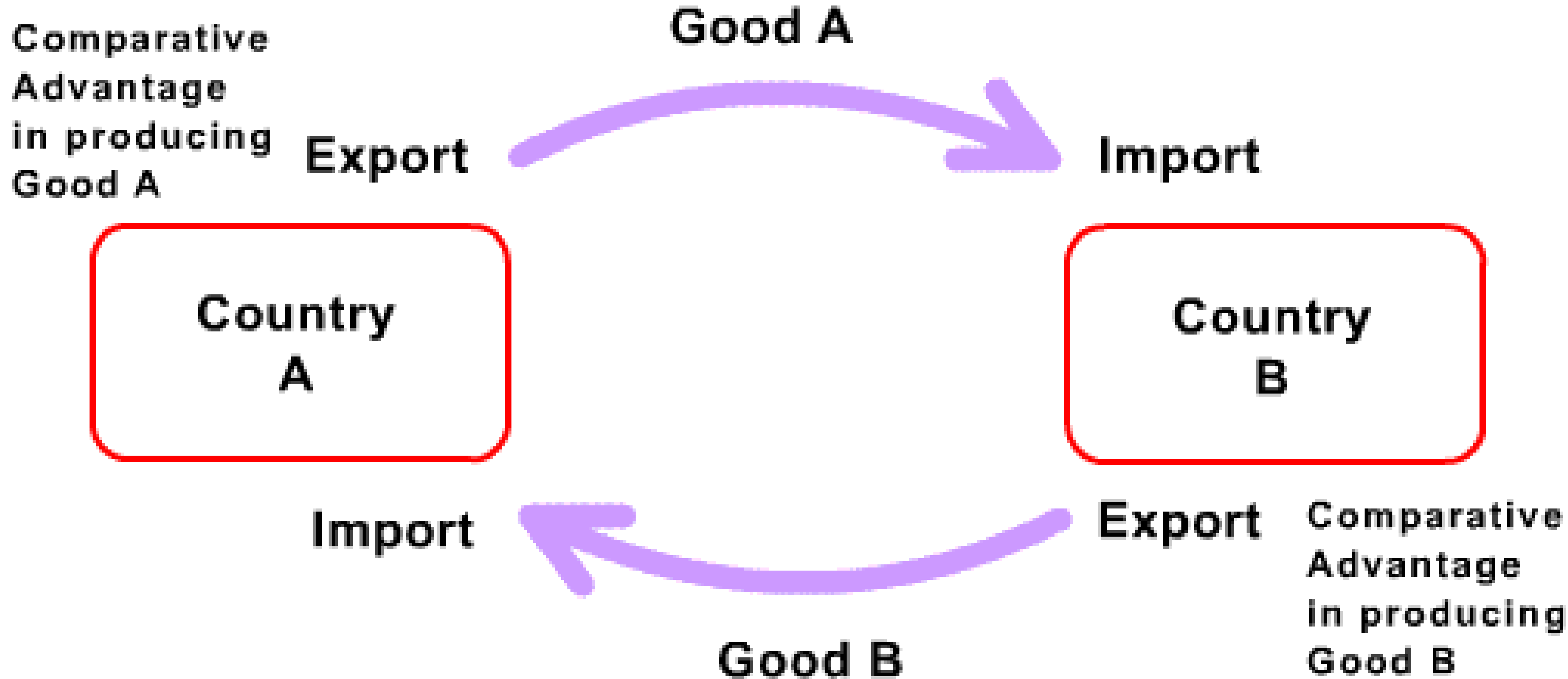

Comparative Advantage in producing Good A
Export
Good A
Import
Country A
Country B
Import
Export
Comparative Advantage in producing Good B
Good B

Table 2. Gains of specialization and trade under comparative advantage

	Production without trade			Production with trade (increasing rice production)			Production with trade (increasing tea production)		
	UK	India	Total	UK	India	Total	UK	India	Total
Tea (tonnes)	5	10	15	0	15	15	0	18	18
Rice (tonnes)	10	12.5	22.5	20	6.25	26.25	20	2.5	22.5
			37.5			**41.25**			**40.5**

New Trade Theory and Dynamic Comparative Advantage

❑ Main Points of the New Trade Theory (Krugman)

- Trade is motivated by 'the **economies of scale**' (cost reduction through expanded market).
- Emphasized incomplete competition or **oligopolistic competition** in the world market.
- **Not the endowed resources but variable accumulation of capital and technological accumulation** by the firm **determine comparative advantages**.
- As the result of **technological innovation through technological learning and R&D investment**, economies of scale are dynamic (following the learning curve). Accumulated past R&D and capital investments determine current **productivity**.
- Any country can build **dynamic comparative advantages with proper policies and efforts.**

What is the 'Heckscher-Ohlin Model'?

The Heckscher-Ohlin model is a theory in economics explaining that countries export what they can most efficiently and plentifully produce. This model is used to evaluate trade and, more specifically, the equilibrium of trade between two countries that have varying specialties and natural resources. The model places emphasis on the exportation of goods requiring factors of production that a country has in abundance and the importation of goods that a nation cannot produce as efficiently.

What Is The Heckscher-Ohlin Theory?

- Eli Heckscher (1919) and Bertil Ohlin (1933) - comparative advantage arises from differences in national factor endowments
  - the extent to which a country is endowed with resources like land, labor, and capital
- The more abundant a factor, the lower its cost

Heckscher - Ohlin's Theory

Eli Heckscher

Bertil Ohlin

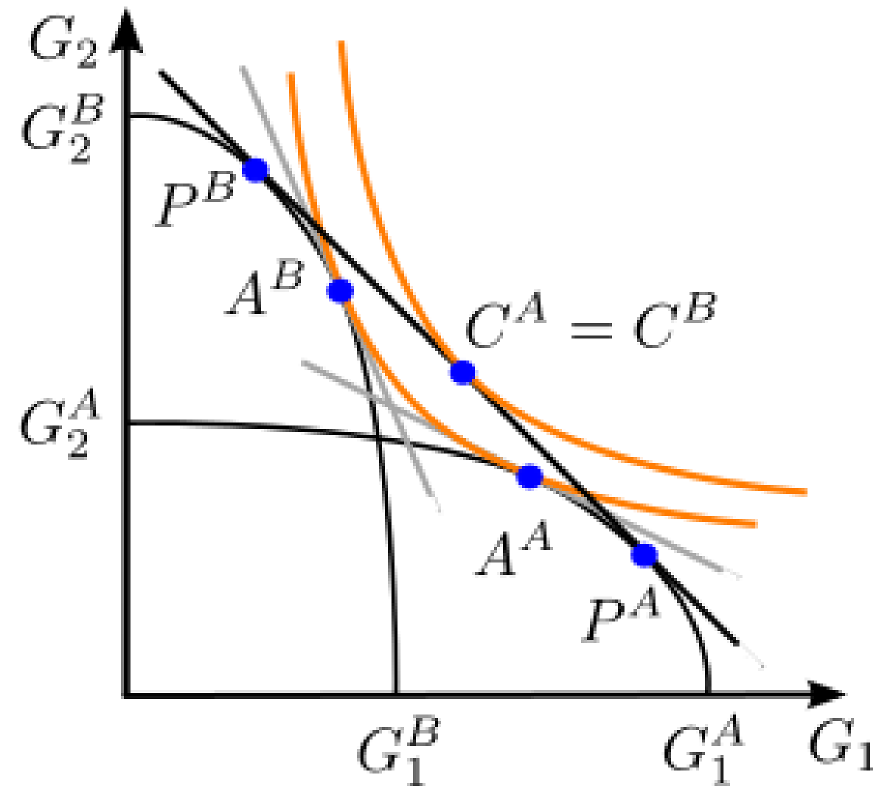
Factor Endowment Theory (Heckscher – Ohlin)

- <u>Focus on Supply</u>:
  - Technology and input factors: labor, capital, land (natural resources)
- <u>Assume</u>: everyone uses the same technologies to make things.
  - Also assume competitive factor markets: within each country, the factor's "wage" is the same in all industries.
- <u>Then</u>: a nation has *comparative advantage* in things that use a lot of its *relatively abundant and cheap* factor.

  Also assume everyone has roughly the same tastes.

- <u>Then</u>: a nation exports things that use a lot of its *relatively abundant and cheap* factor.

The critical assumption of the Heckscher–Ohlin model is that the two countries are identical, except for the difference in resource endowments. This also implies that the aggregate preferences are the same. The relative abundance in capital will cause the capital-abundant country to produce the capital-intensive good cheaper than the labor-abundant country and vice versa.



Basic situation: Two identical countries (A and B) have different initial factor endowments. Autarky equilibrium (): no trade, individual production equals consumption. Trade equilibrium: both countries consume the same (), especially beyond their own Production–possibility frontier; production and consumption points are divergent.

INITIALLY, WHEN THE COUNTRIES ARE NOT TRADING:

the price of the capital-intensive good in the capital-abundant country will be bid down relative to the price of the good in the other country,

the price of the labor-intensive good in the labor-abundant country will be bid down relative to the price of the good in the other country.

ONCE TRADE IS ALLOWED, PROFIT-SEEKING FIRMS WILL MOVE THEIR PRODUCTS TO THE MARKETS THAT HAVE (TEMPORARY) HIGHER PRICE. AS A RESULT:

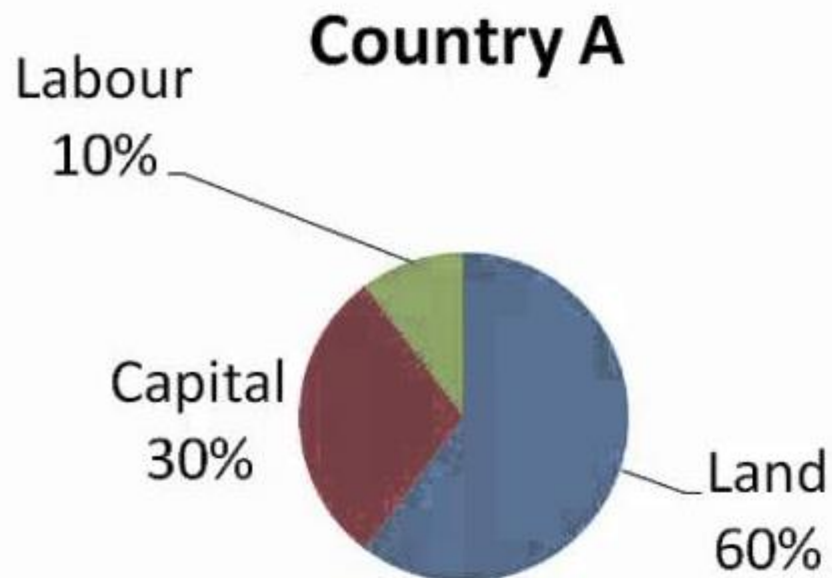
the capital-abundant country will export the capital-intensive good,

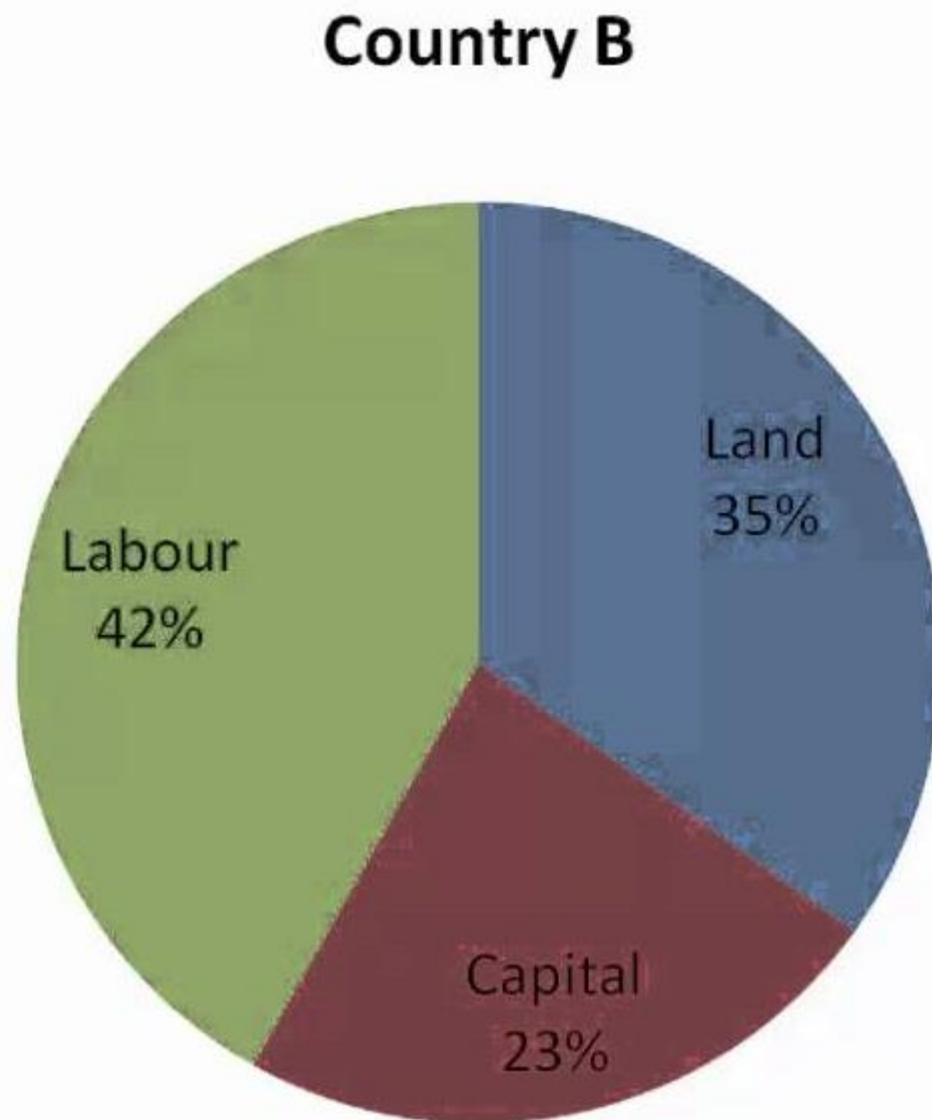
the labor-abundant country will export the labor-intensive good.

Empirical Evidence of the Heckscher-Ohlin Model (cont.)

- But because factor prices are not equalized across countries, the predicted volume of trade is much larger than actually occurs.
  - A result of "missing trade" discovered by Daniel Trefler.
- The reason for this "missing trade" appears to be the assumption of identical technology among countries.
  - Technology affects the productivity of workers and therefore the value of labor services.
  - A country with high technology and a high value of labor services would not necessarily import a lot from a country with low technology and a low value of labor services.

Relative Factor Endowments





Abundance = lower price

Thank
you

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