

Week 6 International Trade

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BUS 346

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Should US imports of prescription drugs from Canada be widened?

- Why does US have import regulations in prescription drugs?

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International Trade

- Objectives
- Introduction
- **International trade theories**
- Trade Intervention
- Barriers to trade

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Why do nations trade?

Trade theories:

- mercantilism
- theory of absolute advantage
- theory of comparative advantage
- factor endowment theory
- international product life cycle theory
- other considerations.

– Thus FDI theories have been developed based on trade theories.

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Mercantilism

- A trade theory, which holds that a government can improve the well-being of the country by encouraging exports and stifling imports (i.e., trade surplus).
 - Theory in 16th ~ 18th centuries.
 - It suggested that the ruling government should play a protectionist role in the economy, by encouraging exports and discouraging imports.
 - European perspective and fueled the many European wars and European imperialism
- Neo-Mercantilism
 - 19th ~ 20th century in the U.S., Germany, and Japan.
 - New Deal policy.
 - Trumpean's view (?)
- Mercantilism vs. Neo-Mercantilism?

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Theory of absolute advantage

- A trade theory, which holds that by specializing in the production of goods, which they can produce more efficiently than any others, nations can increase their economic well-being.
- Natural advantage: climatic conditions, access to certain natural resources, or availability of certain labor forces.
- Acquired advantage: usually in either product or process technology.

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Theory of absolute advantage (cont.)

A simple example

Assume:

- labor is the only cost of production
- lower labor-hours per unit of production means lower production costs and higher productivity of labor.

Labor cost (hours) of production for one unit

	Cloth	Grain
North	10	20
South	20	10

- North has an absolute advantage
- South has an absolute advantage

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Theory of absolute advantage (cont.)

- An exchange ratio will be determined between 2:1 and 1:2 for (Q_{cloth} to Q_{grain}).

	Labor cost (hours) of production for one unit	
	Cloth	Grain
North	10	20
South	20	10

- The ratio will be determined by demand and supply of each country (as well as by many others).
- Assume the exchange ratio is 1:1.
 - What are the benefits of each country?
 - Assume that each country needs only one unit of cloth and one unit of grain.
 - Compare before and after international trade

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Illustration of Absolute Advantage

Figure 5.2 Production Possibilities under Conditions of Absolute Advantage

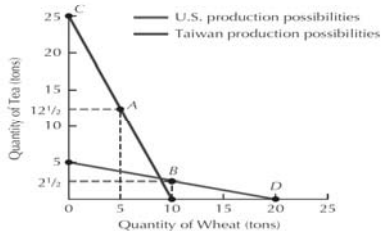
ASSUMPTIONS for Taiwan

1. 100 units of resources available
2. 10 units to produce a ton of wheat
3. 4 units to produce a ton of tea
4. Uses half of total resources per product when there is no foreign trade

PRODUCTION	Tea (tons)	Wheat (tons)
Without Trade:		
Taiwan (point A)	12½	5
United States (point B)	2½	10
Total	15	15
With Trade:		
Taiwan (point C)	25	0
United States (point D)	0	20
Total	25	20

ASSUMPTIONS for United States

1. 100 units of resources available
2. 5 units to produce a ton of wheat
3. 20 units to produce a ton of tea
4. Uses half of total resources per product when there is no foreign trade



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Theory of comparative advantage

- A trade theory, which holds that nations should produce those goods for which they have the greatest relative advantage (David Ricardo, 1817).
- **Comparative advantage** says that global efficiency gains may still result from trade if a country specializes in what it can produce most efficiently—regardless of other countries' absolute advantage

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Theory of comparative advantage (cont.)

Labor cost (hours) of production for one unit

	Cloth	Grain
North	50	100
South	200	200

- North has an absolute advantage in the production of both cloth and grain *but* the relative costs differ.
- In North, one unit of cloth costs 50/100 hours of grain
- In South, one unit of cloth costs 200/200 hours of grain

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Theory of comparative advantage (cont.)

- An exchange ratio ?

	Labor cost (hours) of production for one unit	
	Cloth	Grain
North	50	100
South	200	200

It follows that:

- if North can import more than a half unit of grain for one unit of cloth, it will gain from trade.
- if South can import one unit of cloth for less than one unit of grain, it will also gain from trade.
- Under the circumstance presented in the above example, both countries can benefit from trade.
- Assume the exchange ratio is 1:0.66 for Cloth:Grain
 - What are the benefits of each country?

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Theory of comparative advantage

Labor cost (hours) of production for one unit

	Cloth	Grain
North	50	100
South	200	300

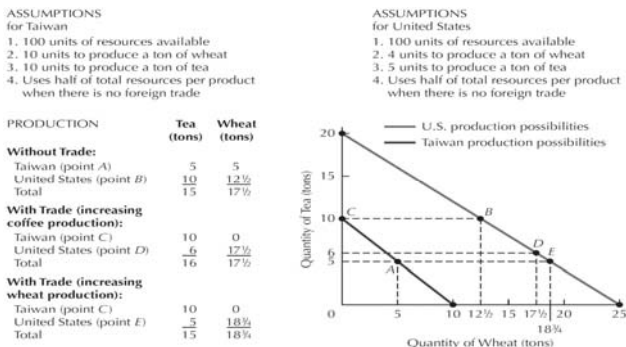
- Does comparative advantage theory work?
- What would be the range of exchange ratio?
- Balassa's (1965) revealed comparative advantage (RCA).

$$RCA_{ij} = \frac{X_{ij} / X_{wj}}{X_i / X_w}$$

X_{ij} : i country's export of commodity j
 X_i : total exports of country i
 X_{wj} : total world exports of commodity j
 X_w : total world exports

Illustration of Comparative Advantage

Figure 5.3 Production Possibilities under Conditions of Comparative Advantage



Assumptions made about absolute and comparative advantage

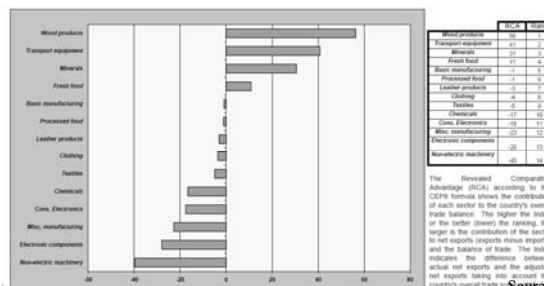
- Fully employed resources—assumes use of full resources
- Economic efficiency—assumes the goal is maximum income
- Division of Gains—may forgo trading if to prevent others from gaining an advantage
- Transport costs—If it costs more to transport than the savings, the theories don't work
- Insufficient Demand—Even with insufficient demand, there is still an advantage
- Statics and Dynamics—Looking at one point in time
- Services—The theories deal with products rather than services

Revealed comparative Advantage of Canada

- Balassa's (1965) revealed comparative advantage (RCA).

$$RCA_{ij} = \frac{X_{ij} / X_{wj}}{X_i / X_w}$$

X_{ij} : i country's export of commodity j
 X_i : total exports of country i
 X_{wj} : total world exports of commodity j
 X_w : total world exports



Factor proportion (endowment) theory (Cont'd)

- Weaknesses of factor endowment theory:
 - some countries have minimum wage laws that result in high prices for relatively abundant labor.
 - the Leontief paradox:**

– Aside) Leontief Production Function

International product life cycle theory (IPLC)

- A theory of the stages of production for a product with new “know-how”; it is first produced by the parent firm, then by its foreign subsidiaries, and finally anywhere in the world where costs are the lowest; it helps to explain why a product that begins as a nation’s export often ends up as an import.



Relationship Between Trade and Factor Mobility

- Substitution
 - When the factor proportions vary widely among countries, pressures exist for the most abundant factors to move to countries with greater scarcity, where they can command a better return.
- Complementarity
 - Foreign investment often stimulates trade because of
 - the need for components,
 - the parent company’s ability to sell complementary products, and
 - the need for equipment for subsidiaries.

Economic Rationales for Trade Restrictions

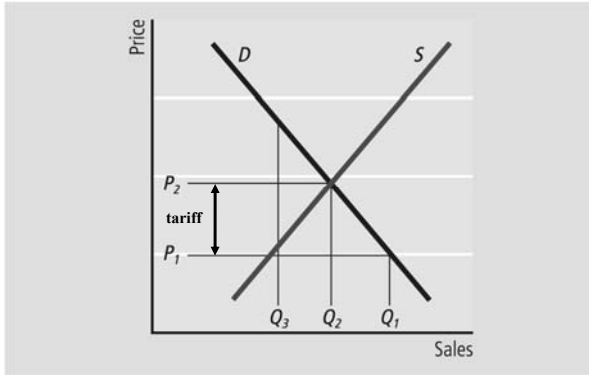
- To fight unemployment
- To protect infant industries
- To develop an industrial base
 - Increase manufacturing outputs
 - Import restrictions lead to foreign investment inflows
 - Prices and sales of agricultural products and raw materials fluctuate widely.
 - Markets for industrial products grow faster.
- Economic relationships with other countries
 - Making balance-of-trade adjustments
 - Gaining comparable access to foreign markets
 - Using restrictions as a bargaining tool
 - Controlling prices.

Commonly used barriers to trade

- Price-based barriers
 - Tariffs:** a tax on goods shipped internationally
- Quantity limits
 - Quotas:** a quantity limit on imported goods
 - Embargos:** a quota set to zero
- International price fixing
 - A cartel:** a group of firms that collectively agree to fix prices or quantities sold in an effort to control price (ex. OPEC)
- Non-tariff barriers
- Financial limits
 - Exchange rate controls:** controls that restrict the flow of currency
- Foreign investment controls:
 - Limits on FDI
 - Limits on transfer or remittance of funds

Types of tariffs

- Import and export tariffs:** a tax levied on imports or exports of a country
- Transit tariff:** a tax levied on goods passing through the country
- Specific duty:** a tariff based on the number of items being imported
- Ad valorem duty:** a tariff based on a percentage of the value of imported goods
- Compound duty:** a tariff consisting of both a specific and ad valorem duty.



Impacts of a tariff

Source: Raymond Vernon and Louis T. Wells, Jr., *The Manager in the International Economy* (Englewood Cliffs, NJ: Prentice-Hall, 1991), p. 85.

Non-tariff barriers to trade

- Quotas, Export restraint, Embargoes
- “Buy national (local)” restrictions
- Customs valuation
- Technical barriers (standards, labels)
- Antidumping legislation, subsidies, and countervailing duties
- Agricultural product regulations and subsidies
- Administrative delays

Other economic developments

- **Countertrade:** a government in importing country requires the exporter to provide it with additional economic benefits such as jobs or technology as part of the transaction.
- **Trade in services:** as high-income countries move toward a service economy, trade in services has grown
 - Essentiality, not-for-profit services, standards, immigration
- **Free trade zones:** a designated area where importers can defer payment of customs duty while further processing of products takes place (as a foreign trade zone).

NEW NAFTA: USMCA

The principles of Canada’s trade negotiations (CPTPP)

- Necessary diversification
 - Diversified from high dependency on vulnerable (and hostile) US economy/politics.
- Continued ambition (comprehensive)
 - Inclusion of services, new technologies, investments, intellectual properties, etc.
- Progressive agenda
 - corporate social responsibility; cultural identity and diversity;
 - environmental protection and conservation;
 - gender equality; Indigenous rights; labour rights;
 - inclusive trade; traditional knowledge; and others.