

Date:

Name:

Lecture 2b: International Trade (David Ricardo and the Theory of Comparative Advantage)

- After this lesson, students must be able to explain, with examples and graphical illustrations, The Theory of Comparative Advantage propounded by David Ricardo.

Comparative Advantage: The ability of one nation (region or individual) to produce a commodity at a lesser opportunity cost of other products forgone than another nation (region or individual).

Pre-lecture activity: [Role Play worksheet from the IMF](#)

Let's come back to our previous example:

Consider this situation. There are only 2 countries in the world- USA and China. Both USA and China produce 2 types of goods- Jeans and Toys. The production from the two countries and represented in table 2.

Table 2:

	Jeans (units)	Toys (Units)
USA	200	2000
China	100	1500
Total Output	300	3500

- (a) Should there be trade between USA and China? Yes
- (b) Under what conditions? By applying the Theory of Comparative Advantage.

Detailed explanation:

Assumptions:

1. There are 2 countries in the scenario, USA and China.
2. Both countries produce Jeans and Toys
3. Both have equal amount of resources (10 units) in producing their respective goods (5 for jeans and 5 for toys).
4. There is perfect factor mobility, i.e. resources in the production of jeans can be diverted to the production of toys directly.

Given the above assumptions, we can conclude that 1 units of resource is able to produce 40 units of jeans and 400 units of toys in USA. In China, 1 unit of resource is able to produce 20 units of jeans and 300 units of toys.

For USA to produce 1 unit of Jeans, it has to forgo 10 units of toys. Hence, it can be said that the opportunity cost for 1 unit of toy is 1/10 unit of jeans.

Conversely, for China to produce 1 unit of Jeans, it has to forgo 15 units of toys. Therefore, the opportunity cost for 1 unit of toy is 1/15 unit of jeans in China.

Table 3: Opportunity Cost

	Jeans (units)	Toys (Units)
USA	1	10
China	1	15

By applying the Theory of Comparative Advantage: USA has comparative advantage in the production of Jeans and China in the production of toys.

Conclusion: For maximum benefit (through efficient allocation of resources) USA should specialize in the production of Jeans. China, considering a higher opportunity cost for producing 1 unit of jeans (opportunity cost of 15 units of toys) should specialize in the production of toys.

Table 4: Under conditions of complete specialization

	Jeans (units)	Toys (Units)
USA	400	0
China	0	3000
Total Output	400	3000

If China specializes completely in the production of toys however, the world output will fall by 500 units of toys. In the real world scenario, countries overcome this **through partial specialization**.

Assuming partial specialization, USA would use 8 units of resource to produce jeans (8 X 40) and 2 units to produce toys (2 X 400). China would then only need to specialize in toy production.

Table 5: Under conditions of partial specialization

	Jeans (units)	Toys (Units)
USA	320	800
China	0	3000
Total Output	320	3800

Under such a cooperative arrangement, states can still benefit from trade, in the absence of absolute advantage, without compromising world output.

2iii. Advantages of International Trade

a. Economies of Scale

Economies of scale means that the per unit cost of production is significantly lowered if the goods are produced at a large scale. This is particularly true for sectors like petrochemicals, electronics and automobiles. Through international trade, firms cater to an international market, as opposed to a smaller domestic market. This in economic sense, will lower the cost of production and increase profit margin. For countries like Singapore, the domestic market is very small and international trade is the only viable alternative for economic growth.

b. Economic Development

For export driven countries Japan, export revenues forms one of the biggest elements of their national income. In contemporary times, China is increasingly dependent on its exports to sustain this progressive economic growth and employment rate for its large population.

c. More variety of Goods

International trade allows consumers to enjoy a wide array of products and services. In our case study, the global appeal of the iPod provides testimony to this observation. International Trade is more acute for counties like Singapore, where in the absence of natural resources, the state is dependent on basic necessities like water (from Malaysia), food (e.g. vegetables from Malaysia).

d. Improved goodwill and promote international peace

International trade is one way through which countries build inter-dependent relationships, thus minimizing tensions. Adam Smith observed that international trade will decrease the incentives for war as states cooperate on the basis of trade. In contemporary times, international trade provides countries to have closer ties (e.g. the US has preferential trading relations and accords Most Favoured Nation [MFN] status with its partners).

e. Expansion of world output

When countries specialize and produce goods and services, leveraging on their comparative advantage, the total world output increases. The increase in world output would not only mean that scarce resources are allocated for production efficiently, but might result in a higher consumption and improve standards of living.

2iv. Limits to International Trade (Protectionism)

Comparative advantage aside, countries continue to limit free trade. Such limits to free trade come in many forms, and the following types are most prevalent.

- a. Tariffs on imports:** this is designed to make imported products more expensive and locally produced goods cheaper. E.g. Automobile industry.
- b. Subsidies:** Subsidies are incentives given to local producers in order to increase local production and encourage the growth of domestic industry, at the same time reducing the demand for imports. E.g. The case of Proton Cars in Malaysia.
- c. Quotas:** A quota refers to a fixed quantity/number of certain product that could enter in a country in a given year. E.g. Import quotas on cars in Singapore.
- d. Embargoes:** refer to a complete ban on certain imports, usually used as a diplomatic tool when political relations are soured. E.g. Italy in the 1930s/ Iraq 1990/ North Korea.

Why is protectionism pursued?

The reasons for protectionism may be classified as (i) Economic and (ii) Non-Economic reasons:

- la. Protection of Infant Industries
- lb. Diversification
- lc. Prevention of Dumping
- ld. Protect Employment
- le. Correction of Balance of Trade Deficits
- lia. Protecting key industries of National interest
- lib. Political motivations
- lic. Social/ Moral reason