

International Economics: Lecture 4

Topics in Comparative Advantage

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Misconceptions about Ricardo's Model

Myth 1: *Your country will benefit from free trade only when it will be able to withstand to foreign competition.*

As shown, even when Armenia has lower productivity both in brandy and grain, it gains from trade.

People usually think in terms of absolute advantage, but that is a misleading concept.



Author: Chris Grosz

Misconceptions about Ricardo's Model

Myth 2: *Low wages are a form of slavery.*

That is a value judgment, but even if that is true, the slaves benefit from trade, especially if they are employed in export industries.

In our example, if Armenia refuses to be exploited, then real wages of brandy producers in terms of grain will fall even further.



Jasmine Akhter, 26, works in the garment industry since when she was 16.

She earns less than \$100 a month. Her living conditions are deplorable, but they would be even worse without trade.

If and when Bangladesh will cease to be in the center of world garment industry, most of 4mln woman employed by that industry will lose job and even that meager income.

Many goods & 2 countries

$$\frac{a_{L1}}{a_{L1}^*} < \frac{a_{L2}}{a_{L2}^*} < \dots < \frac{a_{Ln}}{a_{Ln}^*}$$

The pattern of trade depends on relative productivities and relative wage.

Goods will be produced in Armenia only if it is cheaper to make here.

$$wa_{Li} < w^* a_{Li}^* \quad \frac{a_{Li}}{a_{Li}^*} < \frac{w^*}{w}$$

Otherwise they will be produced in Russia.

$$wa_{Li} > w^* a_{Li}^* \quad \frac{a_{Li}}{a_{Li}^*} > \frac{w^*}{w}$$

$$\frac{a_{L1}}{a_{L1}^*} < \frac{a_{L2}}{a_{L2}^*} < \dots < \frac{w^*}{w} < \dots < \frac{a_{Ln}}{a_{Ln}^*}$$

Many goods & 2 countries

| | Wine | Brandy | Grain | Gun | Butter |
|-----------------------|------|--------|-------|-----|--------|
| Armenia | 10 | 15 | 8 | 25 | 14 |
| Russia | 2 | 5 | 1 | 10 | 2 |
| Relative productivity | 5 | 3 | 8 | 2.5 | 7 |

Armenia is 8 times less productive in grain, but just 2.5 times less productive in guns. So Armenia's comparative advantage is the highest in guns.

Reorder according to decreasing comparative advantage of Armenia, which is the same as increasing comparative advantage of Russia

| | Gun | Brandy | Wine | Butter | Grain |
|-----------------------|-----|--------|------|--------|-------|
| Relative productivity | 2.5 | 3 | 5 | 7 | 8 |

In guns absolute disadvantage of Armenia is the least, but comparative advantage is the highest.

In grain absolute advantage of Russia is the greatest, but comparative advantage is the highest.

Many goods & 2 countries

| | Gun | Brandy | Wine | Butter | Grain |
|-----------------------|-----|--------|------|--------|-------|
| Relative productivity | 2.5 | 3 | 5 | 7 | 8 |

In guns absolute disadvantage of Armenia is the least, but comparative advantage is the highest.

In grain absolute advantage of Russia is the greatest, but comparative advantage is the highest.

In free trade wage rate in Armenia may be from 2.5 to 8 times lower, than in Russia.

$$\text{If } \frac{w^*}{w} = 4$$

Armenia will produce and export guns & brandy.
Russia will produce and export grain, butter, & wine.

$$\frac{a_{L1}}{a_{L1}^*} < \frac{a_{L2}}{a_{L2}^*} < \dots < \frac{w^*}{w} < \dots < \frac{a_{Ln}}{a_{Ln}^*}$$

Comparative vs. Absolute advantage

$$\frac{a_{L1}}{a_{L2}} < \frac{a_{L1}^*}{a_{L2}^*}$$

Armenia has comparative advantage in good #1, as opportunity cost of good #1 in Armenia is lower.

$$a_{L1} < a_{L1}^*$$

$$a_{L2} > a_{L2}^*$$

Armenia has absolute advantage in good #1, as unit labor requirement is lower.

Country may not have **absolute** advantage in anything, but it (almost) always has **comparative** advantage in something.

The fundamental basis of trade is comparative, not absolute advantage.

Comparative advantage is the best example of an economic principle that is undeniably true yet not obvious to intelligent people.

Paul Samuelson



The idea of comparative advantage -- is ... a concept that seems simple

Yet ... beyond the narrow circle of academic economists [one] quickly realizes that it must be ... a very difficult concept indeed.

... intellectuals ... somehow find this particular idea impossible to grasp.

Ricardo's difficult idea
Paul Krugman



Thank you and enjoy.

But remember Confucius words

Thinking without learning is
dangerous.