

Ricardian Model Example used in lecture :

Consider a model with two countries (Home and Foreign (*)), two goods (Textiles and Soy) and one input (Labor). The production technologies are specified by the following unit labor requirements:

	Home	Foreign (*)
Soy	2	3
Textiles	1	6

Labor endowments in each country: 60 units. Preferences are “nice” and identical across countries. Assume that Textiles is used as a numeraire ($p_T = 1$) and the free trade prices are: $p_S / p_T = 1.5$

Results:

	Home Autarky	Home Free Trade	Foreign (*) Autarky	Foreign (*) Free Trade
p_S / p_T	2	1.5	1/2	1.5
w / p_T	1	1	1/6	1/2
w / p_S	1/2	0.6	1/3	1/3
p_T	1	1	1	1
p_S	2	1.5	1/2	1.5
w	1	1	1/6	1/2
AC_T	1	1	1	3
AC_S	2	2	1/2	1.5

Remarks:

- (1) Trade arises because of differences in technology.
- (2) Under Free trade each country exports the commodity that they have a Comparative Advantage on (i.e. Home exports Textiles and Foreign exports Soy).
- (3) In Autarky, both Textiles and Soy are produced in the two countries. Under Free trade home specializes in Textiles and Foreign in Soy.
- (4) Free trade is better than autarky for both countries. One way to show this is to notice that the real wage in terms of the import commodity goes up and the real wage in terms of the export commodity remains the same. Therefore workers are better off. Since labor is the only factor this implies that everybody is better off.
- (5) Trade does not equalize wages across countries. The Home country has a better technology so its real wages are higher than the ones in Foreign both in autarky and free trade.
- (6) Average Costs: the exporter of a particular good can produce it cheaper than the importer.

Ricardian Model

Main Results

(1) Pattern of Trade: Under free Trade (FT) Each country exports the commodity that they have a Comparative Advantage (CA).

(2) Specialization: In the standard examples under free trade each country fully specializes in the commodity they have a CA.

(3) Gains from Trade: We can show this with a diagram or looking at the real wages in terms of the import commodity.

Remark: under FT real income (or real wages) differ across countries.

(4) Costs: Under FT with complete specialization the exporter country of a particular commodity is the low cost producer.

Steps

- Draw PPF, Indiff. Curves and identify autarky prices and production/consumption bundle
- Identify CA
- Autarky: compute autarky real wages, choose a numeraire, compute average costs.
- Free Trade: taking FT prices as given identify production and consumption points, trade flows, real wages. Choose numeraire and calculate average costs.