

## The Standard Trade Model

### KOM, Ch 6:

- At the micro level trade arises because of differences in prices in autarky. But in the general-equilibrium, standard model, these autarky price differences arise because of more basic differences in the countries. What is the basic difference that plays that role? **<a: Differences in their production possibility frontiers.>**
- What is meant by a country's "terms of trade"? **<a: The price of its exports relative to its imports.>**
- The equation of an iso-value line, with  $Q_C$  on the horizontal axis and  $Q_F$  on the vertical axis, is  $Q_F = V/P_F - (P_C/P_F)Q_C$ , from which it is clear that the slope of the iso-value line is (minus)  $P_C/P_F$ , and therefore that if the relative price of  $C$  goes up, the line gets steeper. Is there a way to see this without deriving or remembering the equation? **<a: Yes. As you rotate the line to make it steeper, notice that a given amount of cloth becomes worth a larger amount of food.>**
- The text says, in the section "Relative Prices and Demand," that "the value of an economy's consumption equals the value of its production." What does this mean that the text is assuming about the balance of trade? **<a: That trade is balanced, since a trade surplus means consuming less than income and a trade deficit means consuming more than income.>**
- Does the standard model, which is a general equilibrium model, display upward sloping supply and downward sloping demand? How does it differ, in this respect, from the partial equilibrium model we have seen before? **<a: It does. But instead of these being quantities of a single good as functions of its price only, here they are for relative quantities as functions of their relative price.>**
- Suppose that you knew that events in other countries were going to worsen your country's terms of trade. Would your country therefore be better off if it did not trade at all? **<a: No. A worsening of the terms of trade will reduce the gains from trade, but not make them negative. Therefore, going to autarky would necessarily be worse.>**
- An earlier edition of the textbook, in the section on "Determining Relative Prices," said "Home's terms of trade are measured by  $P_C/P_F$  while Foreign's are measured by  $P_C/P_F$ ." Was that right? **<a: No, this must have been a typo, and it was corrected in later editions. Each country's terms of trade is the relative price of its export, and since they must export different goods, they cannot be the same. Since the diagrams of the text have Home exporting cloth, the terms of trade of Foreign must be  $P_F/P_C$ , not  $P_C/P_F$ .>**
- Suppose that a country's government could choose between two policies that would increase its GDP (at unchanged prices) by the same amount, one causing growth that is import-biased and one that is export-biased. Which would be better for the country if the country were small? Which would be better if it were large? **<a: If the country were small, it wouldn't matter, since both policies would lead to the same increase in value. If the country were large, however, the**

- import-biased growth would be better. Export-biased growth will certainly cause the world relative price of the export good to fall, worsening the country's terms of trade. Import-biased growth, if not too biased, will do the same, but by less. And if the import bias is large enough then the terms of trade would improve.>**
- Suppose that the foreign country were to grow in a manner that is neither export-biased nor import-biased, and that therefore leaves its relative supply curve unchanged. What would happen, if anything, to world prices and to the welfare of the home country? **<a: Even neutral growth will cause a large country's terms of trade to worsen, and therefore the other country benefits.>**
  - An import tariff raises the domestic price above the world price, while an export subsidy also raises the domestic price above the world price. Why, then, does the model say that the effects of these two policies are opposite? **<a: Because while both are raising a domestic price, they are raising it for different goods.>**
  - The textbook examines cases of an import tariff and of an export subsidy. What would be the effects of an import subsidy, or an export tax? **<a: The import subsidy will be opposite to an import tariff, and therefore the same as an export subsidy. The export tax will be the opposite of an export subsidy, and thus the same as an import tax.>**

**Bernhofen & Brown, "Gains from trade: evidence from nineteenth century Japan," 2017.:**

- Why is it usually hard to observe the effects of trade? **<a: Because we usually only observe countries that are already trading, and differences among them and over time can reflect many things other than changes in trade.>**
- Why did the case of Japan provide a natural experiment for observing the effects of trade? **<a: Mainly because it did not trade, essentially at all for a long time, then was forcefully opened up to nearly free trade very suddenly. Also important was that it had a market economy before this happened.>**
- What did the researchers observe about trade in Japan that confirmed theory of comparative advantage? **<a: That "Japan exported products with relatively low prices during autarky and imported products that had had relatively high autarky prices.">**
- How large were the gains from trade? **<a: 7% of GDP.>**