CHAPTER 6  GAINS FROM TRADE IN NEOCLASSICAL THEORY

CONCEPT CHECK

1. Briefly describe the minimum conditions for trade to take place between two countries, that is, for there to be a difference in their respective price ratios in autarky.
2. Why do different demand conditions influence the basis for trade in neoclassical theory but not in Classical theory?
3. How can opening a country to trade influence income distribution? How does this affect our ability to demonstrate the gains from trade?

SUMMARY

Neoclassical trade theory’s demonstration of the gains from international trade uses the analytical tools of the production-possibilities frontier and the community indifference curve. In autarky, a country reaches its highest indifference curve when the marginal rate of transformation (MRT) in production equals the price ratio of goods, which in turn equals the marginal rate of substitution (MRS) in consumption. When the country is opened to international trade, it faces a new set of relative prices. The adjustment by producers and consumers to this new set of prices and the resulting trade enables the country to attain a higher indifference curve. Consideration of the minimal conditions necessary to produce different autarky prices showed that autarky price ratios can differ as long as there is a difference in either demand or supply conditions. For example, two countries with identical (increasing-opportunity-cost) PPFs can both gain from trade if tastes differ between the countries. Or a basis for trade can exist if different technologies are employed by countries that are otherwise identical. The important role played by the relative availability of factors in influencing relative prices in autarky will be discussed in Chapter 8, “The Basis for Trade: Factor Endowments and the Heckscher-Ohlin Model.”

The neoclassical theory of trade makes use of some special assumptions involving adjustment to change, full employment, and indifference curves. The implications of these assumptions were discussed briefly in this chapter. In addition, we frequently utilized an assumption that, when a country is opened to trade, the country takes the new set of world prices as given. Forces influencing the determination of the new price ratio will be covered in more detail in the next chapter.

KEY TERMS

compensation principle  production gain (or gains from specialization)
consumption gain (or gains from exchange)  total gains from trade
trade adjustment assistance  trading line

QUESTIONS AND PROBLEMS

1. Indicate the equilibrium production and consumption point in autarky, using a PPF and a community indifference curve under increasing-opportunity-cost conditions. Why is this an equilibrium? What must occur for this country to gain from trade?
2. Assume that a country produces and consumes two goods, cloth and machines, and is in equilibrium in autarky. It now finds that it can trade at international prices where \( \frac{P_{\text{cloth}}}{P_{\text{machines}}} \) on the world market is greater than \( \frac{P_{\text{cloth}}}{P_{\text{machines}}} \) in the domestic market. Should it trade? If so, what commodity should it export? Why? Will it gain from trade? How do you know?
3. Explain the difference between the “gains from exchange” (consumption gain) and the “gains from specialization” (production gain).
4. Suppose a country that is producing within its production-possibilities frontier in autarky experiences an 8 percent rate of unemployment. Is it possible for it to gain from trade if the rate of unemployment remains approximately the same?
5. “The inability of factors to move from one use to another in production will completely take away any possible gains from trade.” Agree? Disagree? Explain.
6. What general conditions must hold for one to be able to use community indifference curves to represent consumer well-being in a country and demonstrate gains from international trade?
7. The United States has had an embargo on trade with Cuba for 50 years, but pressure is increasing to relax it. Opponents of ending the embargo argue that opening trade between the United States and Cuba would benefit Cuba and hurt the United States by injuring U.S. producers of goods that compete with potential Cuban exports. Evaluate this position utilizing what you have learned in this chapter.
1. Explain the difference between the price and the physical definitions of factor abundance. When could they give conflicting answers about which factor is the abundant factor?

2. If the K/L ratio for Belgium is higher than that for France, what kind of products might Belgium export to France? Why?

3. Suppose that the K/L ratio is higher in France than in Spain. What would you expect to happen to wages in France as trade took place between the two countries? Why?

4. You read in a newspaper that the owners of capital in a particular country are urging their government to restrict trade through import quotas. What might you infer about the relative factor abundance in that country? Why?

5. It has been argued that opening a country to international trade is a great "antitrust" policy. What impact would the threat of imports have on a monopolist who had never before been faced with foreign competition? How would the monopolist respond concerning the quantity produced and the price charged in the domestic market?

6. How does the existence of demand reversal complicate the predictions of Heckscher-Ohlin?

7. Using the specific-factors model, explain why you might expect to see certain capital owners and labor groups arguing against expanding trade in a capital-abundant country.

8. Given your knowledge of the basis for trade, would you be surprised or not to learn that the composition of the exports and imports of a former "Soviet bloc" country such as Hungary or Poland changed with the dissolution of the Soviet Union and the opening of trade with the West? Explain your answer.

9. In Figure 14, suppose the country is producing in equilibrium at A'. If P_x then increases such that it would lead to production at B' on the "normal" PPF; would the same change in relative prices lead to production precisely at C' in the specific-factors case? Why or why not?

10. "Within the Heckscher-Ohlin framework, complete factor price equalization cannot be achieved in the presence of transportation costs." Agree? Disagree? Explain.

11. Even though their relative factor abundances differ widely, both India and the United States export similar agricultural products such as rice. What might explain this apparent contradiction of the Heckscher-Ohlin model?

12. "Increasing the mobility of labor and/or capital within a country not only will reduce the internal opposition to the expansion of the country's international trade but also will lead to greater gains in real income for the country." Comment on this statement.