CHAPTER 37

# International Trade

In Chapter 6 you learned about the role of the United States in the global economy and the basic principles of international trade. Chapter 37 extends that analysis by giving you a more advanced understanding of comparative advantage. It also uses the tools of supply and demand to explain the equilibrium prices and quantities of imports and exports and the economic effects of tariffs and quotas. It examines the fallacious arguments for trade protectionism and the global efforts to liberalize trade.

After a brief review of the facts of international trade presented in Chapter 6, the text uses graphical analysis to explain why nations trade: to take advantage of the benefits of specialization. Nations specialize in and export those goods and services in the production of which they have a ***comparative advantage.*** A comparative advantage means that the opportunity cost of producing a particular good or service is lower in that nation than in another nation. These nations will avoid producing and importing the goods and services that other nations have a comparative advantage in producing. In this way all nations are able to obtain products that are produced as inexpensively as possible. Put another way, when nations specialize in those products in which they have a comparative advantage, the world as a whole can obtain more goods and services from its resources; each nation of the world can enjoy a standard of living higher than it would have if it did not specialize and export and import.

The principle of comparative advantage tells us why nations trade, but what determines the equilibrium prices and quantities of the imports and exports resulting from trade? To answer this question, the text uses the ***supply and demand analysis,*** originally presented in Chapter 3, to explain equilibrium in the world market for a product. A simplified two-nation and one-product model of trade is used to construct export supply curves and import demand curves for each nation. Equilibrium occurs where one nation's export supply curve intersects another nation's import demand curve.

Regardless of the advantages of specialization and trade among nations, people in the United States and throughout the world for well over 200 years have debated whether ***free trade or protection*** was the better policy for their nation. Economists took part in this debate and, with few exceptions, argued for free trade and against protection. Those who favor free trade contend that free trade benefits both the nation and the world as a whole. "Free traders" argue that tariffs, import quotas, and other barriers to international trade prevent or reduce specialization and decrease both a nation's and the world's production and standard of living.

Despite the case for trade, nations have erected and continue to erect ***trade barriers*** against other nations. The latter part of this chapter focuses attention on (1) what motivates nations to impose tariffs and to limit the quantities of goods imported from abroad; (2) the economic effects of protection on a nation's own prosperity and on the prosperity of the world economy; (3) the kinds of arguments those who favor protection use to support their position (on what grounds do they base their contention that their nation will benefit from the erection of barriers that reduce imports from foreign nations); and how the nations of the world have responded to trade liberalization through the ***World Trade Organization*** (WTO).

Whether the direction of the international trade policy in the United States will be toward freer trade or more protectionism is a question that gets debated as each new trade issue is presented to the U.S. public. The decision on each issue may well depend on your understanding of the advantages of free trade and the problems with trade protection for the nation and the world economy.

## ■ CHECKLIST

When you have studied this chapter you should be able to

☐ Cite some key facts about international trade.
☐ State the three economic circumstances that make it desirable for nations to specialize and trade.
☐ Compute the costs of producing two commodities when given the data in a two-nation example.
☐ Determine which nation has the comparative advantage in the production of each commodity using the cost data you computed for the two-nation example.
☐ Calculate the range in which the terms of trade will occur in the two-nation example.
☐ Explain how nations gain from trade and specialization based on the two-nation example.
☐ Discuss how increasing costs affect specialization in the two-nation example.
☐ Restate the case for free trade.
☐ Construct domestic supply and demand curves for two nations that trade a product.
☐ Construct export supply and import demand curves for two nations that trade a product.

☐ Use supply and demand analysis to explain how the equilibrium prices and quantities of exports and imports are determined for two nations that trade a product.
☐ Identify the four principal types of artificial barriers to international trade and the motives for erecting these barriers.
☐ Explain the economic effects of a protective tariff on resource allocation, the price of the commodity, the total production of the commodity, and the outputs of foreign and domestic producers of the commodity.
☐ Analyze the economic effects of an import quota and compare them with the economic effects of a tariff.
☐ Enumerate six arguments used to support the case for protection and find the problems with each argument.
☐ Offer a summation of the arguments for and against trade protection.
☐ Describe the formation, purpose, and issues of the World Trade Organization.

## ■ CHAPTER OUTLINE

**1.** Some facts on international trade from Chapter 6 are worth reviewing.

**a.** About 12% of the total output (GDP) of the United States is accounted for by exports of goods and services, a percentage that has doubled since 1975. The percentage of exports is much higher in other industrially advanced nations (e.g., 56% in the Netherlands, 41% in Canada), but the size of the U.S. economy means that it has the largest volume of imports and exports in the world.

**b.** The United States has a trade deficit in goods, a trade surplus in services, and a trade deficit in goods and services.

**c.** The major exports of the United States are computers, chemicals, semiconductors, consumer durables, and aircraft. The major imports are petroleum, automobiles, computers, and clothing. Most of the trade occurs with other industrially advanced nations. Canada is the largest trading partner for the United States.

**d.** The major participants in international trade are the United States, Japan, and the nations of Western Europe. Newer participants include the Asian economies of South Korea, Singapore, Taiwan, Hong Kong (part of China). Russia, the nations of Eastern Europe, and China have increased their international trade.

**e.** International trade and finance is also a focus of economic policy as shown by issues faced by the World Trade Organization (WTO) and International Monetary Fund (IMF).

**2.** The ***economic basis for trade*** is based on several circumstances. Specialization and trade among nations is advantageous because the world's resources are not evenly distributed and efficient production of different commodities requires different technologies and combinations of resources. Also, products differ in quality and other attributes, so people might prefer imported to domestic goods in some cases.

**3.** The ***principle of comparative advantage,*** first presented in Chapter 6 to explain the gains from trade, can now be reexamined with the aid of graphical analysis.

**a.** Suppose the world is composed of only two nations, each of which is capable of producing two different commodities and in which the production possibilities curves are different straight lines (the nations' opportunity cost ratios are constant but different).

**b.** With different opportunity cost ratios, each nation will have a comparative (cost) advantage in the production of one of the two commodities, and if the world is to use its resources economically, each nation must specialize in the commodity in the production of which it has a comparative advantage.

**c.** The ratio at which one product is traded for another—the terms of trade—lies between the opportunity cost ratios of the two nations.

**d.** Each nation gains from this trade because specialization permits a greater total output from the same resources and a better allocation of the world's resources.

**e.** If opportunity cost ratios in the two nations are not constant (if there is increasing cost), specialization may not be complete.

**f.** The basic argument for free trade among nations is that it leads to a better allocation of resources and a higher standard of living in the world. Several side benefits from trade are that it increases competition and deters monopoly, and offers consumers a wider array of choices. It also links the interests of nations and can reduce the threat of hostilities or war.

**4.** ***Supply and demand analysis of exports and imports*** can be used to explain how the equilibrium price and quantity for a product (e.g., aluminum) are determined when there is trade between two nations (e.g., the United States and Canada).

**a.** For the United States, there will be *domestic* supply and demand as well as *export* supply and import demand for aluminum.

(1) The price and quantity of aluminum are determined by the intersection of the domestic demand and supply curves in a world without trade.

(2) In a world with trade, the export supply curve for the United States shows the amount of aluminum that U.S. producers will export at each world price above the domestic equilibrium price. U.S. exports will increase when the world price rises relative to the domestic price.

(3) The import demand curve for the United States shows the amount of aluminum that U.S. citizens will import at each world price below the domestic equilibrium price. U.S. imports will increase when world prices fall relative to the domestic price.

**b.** For Canada, there will be domestic supply and demand as well as export supply and import demand for aluminum. The description of these supply and demand curves is similar to the account of those of the United States previously described in point **a.**

**c.** The equilibrium world price and equilibrium world levels of exports and imports can be determined with

further supply and demand analysis. The export supply curves of the two nations can be plotted on one graph. The import demand curves of both nations can be plotted on the same graph. In this two-nation model, equilibrium will be achieved when one nation's import demand curve intersects another nation's export supply curve.

**5.** Nations limit international trade by erecting ***trade barriers.*** Tariffs, import quotas, a variety of nontariff barriers, and voluntary export restrictions are the principal barriers to trade.

**a.** The imposition of a ***tariff*** on a good imported from abroad has both direct and indirect effects on an economy.

(1) The tariff increases the domestic price of the good, reduces its domestic consumption, expands its domestic production, decreases its foreign production, and transfers income from domestic consumers to government.

(2) It also reduces the income of foreign producers and the ability of foreign nations to purchase goods and services in the nation imposing the tariff, causes the contraction of relatively efficient industries in that nation, decreases world trade, and lowers the real output of goods and services.

**b.** The imposition of a ***quota*** on an imported product has the same direct and indirect effects as that of a tariff on that product, with the exception that a tariff generates revenue for government use whereas an import quota transfers that revenue to foreign producers.

**c.** Special-interest groups benefit from protection and persuade their nations to erect trade barriers, but the costs to consumers of this protection exceed the benefits to the economy.

**6.** The arguments for ***protectionism*** are many, but often of questionable validity.

**a.** The military self-sufficiency argument can be challenged because it is difficult to determine which industry is "vital" to national defense and must be protected; it would be more efficient economically to provide a direct subsidy to military producers rather than impose a tariff.

**b.** Trade barriers do not necessarily increase domestic employment because

(1) imports may eliminate some jobs, but create others, so imports may change only the composition of employment, not the overall level of employment;

(2) the exports of one nation become the imports of another, so tariff barriers can be viewed as "beggar thy neighbor" policies;

(3) other nations are likely to retaliate against the imposition of trade barriers that will reduce domestic output and employment; and

(4) in the long run, barriers create a less efficient allocation of resources by shielding protected domestic industries from the rigors of competition.

**c.** Using tariff barriers to permit diversification for stability in the economy is not necessary for advanced economies such as the United States, and there may be great economic costs to diversification in developing nations.

**d.** It is alleged that infant industries need protection until they are sufficiently large to compete, but the argument may not apply in developed economies: It is difficult to select which industries will prosper; protectionism tends to persist long after it is needed; and direct subsidies may be more economically efficient. For advanced nations, a variant of this argument is ***strategic trade policy.*** It justifies barriers that protect the investment in high-risk, growth industries for a nation, but the policies often lead to retaliation and similar policies from other trading nations.

**e.** Sometimes protection is sought against the "dumping" of excess foreign goods on U.S. markets. Dumping is a legitimate concern and is restricted under U.S. trade law, but to use dumping as an excuse for widespread tariff protection is unjustified, and the number of documented cases is few. If foreign companies are more efficient (low-cost) producers, what may appear to be dumping may actually be comparative advantage at work.

**f.** Protection is sometimes sought because of the cheap foreign labor argument; it should be realized that nations gain from trade based on comparative advantage, and without trade, living standards will be lower.

**g.** In summary, most protectionist arguments are fallacious or based on half-truths. The only points that have some validity, under certain conditions, are the infant industry and military-sufficiency arguments, but both are subject to abuse. The historical evidence suggests that free trade promotes and protectionism deters prosperity and economic growth in the world.

**7.** The ***World Trade Organization*** (WTO) is an international agency with about 140 participating nations that is charged with overseeing a 1994 trade agreement among nations. This agreement sought trade liberalization by: reducing tariffs worldwide; implementing new rules to promote trade in services; cutting domestic subsidies for agricultural products; protecting intellectual property; and phasing out quotas on textiles and apparel. The WTO oversees provisions of the agreement, rules on disputes, and meets on occasion to consider other trade policies. The work of the WTO is not without controversy. Critics wildly claim that it promotes global capitalism at the expense of labor and the environment. Economists argue that trade liberalization increases economic efficiency and output worldwide, and that these benefits can then be used to address domestic concerns.

## ■ HINTS AND TIPS

**1.** In the discussion of ***comparative advantage,*** the assumption of a constant-cost ratio means the production possibilities "curves" for each nation can be drawn as straight lines. The slope of the line in each nation is the opportunity cost of one product (wheat) in terms of the other product (coffee). The reciprocal of the slope of each line is the opportunity cost of the other product (coffee) in terms of the first product (wheat).

2. The ***export supply and import demand curves*** in Figures 37–3 and 37–4 in the text look different from the typical supply and demand curves that you have seen so far, so you should understand how they are constructed. The export supply and import demand curves for a nation do not intersect. Each curve meets at the price point on the *Y* axis showing the equilibrium price for domestic supply and demand. At this point there are no exports or imports.

**a.** The export supply curve is upsloping from that point because as world prices rise above the domestic equilibrium price, there will be increasing domestic surpluses produced by a nation that can be exported. The export supply curve reflects the positive relationship between rising world prices (above the domestic equilibrium price) and the increasing quantity of exports.

**b.** The import demand curve is downsloping from the domestic equilibrium price because as world prices fall below the domestic equilibrium price, there will be increasing domestic shortages that need to be covered by increasing imports. The import demand curve reflects the inverse relationship between falling world prices (below the domestic price) and the increasing quantity of imports.

3. One of the most interesting sections of the chapter discusses the arguments for and against trade protection. You have probably heard people give one or more of the arguments for trade protection, but now you have a chance to use your economic reasoning to expose the weaknesses in these arguments. Most are half-truths and special pleadings.

## ■ IMPORTANT TERMS

**labor-intensive goods**
**land-intensive goods**
**capital-intensive goods**
**cost ratio**
**principle of comparative advantage**
**terms of trade**
**trading possibilities line**
**gains from trade**
**world price**
**domestic price**
**export supply curve**
**import demand curve**
**equilibrium world price**
**tariff**
**revenue tariff**
**protective tariff**
**import quota**
**nontariff barrier**
**voluntary export restriction**
**strategic trade policy**
**dumping**
**World Trade Organization (WTO)**