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# Global Trade

## Learning Objectives

By the end of this chapter, you will be able to:

- Describe the benefits of free trade based on comparative advantage.
- Analyze the effects of tariffs, quotas, and other trade restrictions.
- Evaluate the arguments for tariff protection.
- Discuss the costs and benefits of forming free trade areas and common markets.
- Evaluate the impact of immigration and direct foreign investment.

## Introduction

**C**onsider this... NAFTA, or the North American Free Trade Agreement, which was signed in 1994 by the United States, Mexico, and Canada, was the largest trading bloc in combined GDP as of 2010. However, back in the 1990s, NAFTA was surrounded by debate and disagreement. It represented all the fears, hopes, and uncertainties that firms and workers had about foreign competition at that time. Will we export more to Mexico? Will cheap Mexican labor undercut American workers? Will better job opportunities in Mexico slow the tide of immigrants, legal and illegal, from Mexico to the United States?

The issues that surrounded NAFTA were much the same as the questions surrounding trade policy in general. Economic relations with the rest of the world are increasingly important to the American economy. You may drive a Japanese car, drink coffee from Brazil, eat Mexican tomatoes and Honduran bananas, or take pictures with a German camera. Chances are there is a factory of a foreign-owned multinational corporation close to where you live.

Even for a country as large as the United States, where trade with other countries is a relatively small fraction of GDP, international trade has an increasingly large impact on the domestic economy. The percentage of output and sales entering into international trade has increased tremendously in the last 30 years. Foreign competition is important to major industries such as textiles, steel, and autos. Immigration (both legal and illegal), foreign direct investment in the United States, and American investment abroad all play a large role in the political debate and the daily news.

### 15.1 Why Nations Trade

**T**he reasons for international trade are really no different from the reasons for trade between individuals who live in the same country. It is important to realize that in most cases international trade takes place between individuals and firms. When we speak of trade between the United States and Japan, we are really talking about trade between individuals and firms in these countries. These individuals and firms trade for the same reasons that individuals and firms within a country trade. Trade takes place because of the availability of a better product or a better price or because of an opportunity for profit. Exactly what determines the patterns of trade between nations and how much each nation benefits have been important concerns to economists as long as there have been nation-states and economists.

Before Adam Smith, the dominant view was that government should direct many spheres of economic activity, especially international trade. This view, called mercantilism, put heavy emphasis on control of shipping, maintaining colonies, discouraging imports, and promoting exports. Two famous economists are responsible for developing the arguments for a policy of free trade. Adam Smith's *Wealth of Nations* in 1776 made a strong case for freedom in every sphere of economic activity. David Ricardo, a 19th-century British economist and member of Parliament, was very interested in the practical question of what trade policy England should pursue. He developed the principle of comparative advantage in his classic 1814 book, *Principles of Political Economy and Taxation*.

## The Benefits of Exchange

It is easier to envision the processes at work in international trade by focusing first on exchange rather than production. Consider Karolyn and Andrew, who are both stamp collectors. Like most stamp collectors, they expand their collections by trading duplicates of stamps they have. Let's say that Karolyn has the complete 1938 presidential series and several extras. Andrew has some gaps in that series, but has some extra Canadian stamps that he would like to trade and that Karolyn would like to have. They work a deal. She trades three presidential stamps for five Canadian stamps. As an outside observer, you might say that the trade was one of "equal values." That may be true in a market sense, but the stamps weren't of equal value to Andrew and Karolyn. Karolyn wanted the Canadian stamps more than she wanted the extra presidential stamps, and Andrew felt just the opposite. They both were better off as a result of the trade.

Economists who look at international trade emphasize the **gains from trade**, or the higher level of economic well-being that comes partly from greater production when nations specialize and partly from mutually beneficial exchange. While people do occasionally trade out of existing stocks of goods, like Karolyn and Andrew, most of the time they produce in order to trade. The explanation of how people and nations decide what to produce for trade is based on the concepts of absolute advantage and comparative advantage.

## Absolute Advantage

Suppose Karolyn and Andrew are sister and brother, and their parents want the 12 windows in the house washed and the 24 square yards of leaves raked. Karolyn and Andrew estimate their output as shown in Table 15.1.

**Table 15.1: An example of absolute advantage**

	Windows per hour	Square yards of leaves per hour
Karolyn	4	6
Andrew	2	8

If this brother and sister divided the tasks equally, they would each have to wash half the windows (6 for Karolyn, which would take her 1 1/2 hours, and 6 for Andrew, which would take him 3 hours) and rake 12 square yards of leaves (which would take Karolyn 2 hours and Andrew 1 1/2 hours to complete). At the end of a long afternoon, Karolyn would have worked 3 1/2 hours, and Andrew would have worked 4 1/2 hours. On the other hand, if they each specialized in what they do better, Karolyn could have all of the windows washed in just 3 hours and Andrew could have all of the leaves raked in 3 hours. There would be a clear gain of a valuable 1/2 hour for Karolyn and 1 1/2 hours for Andrew.

Both Karolyn and Andrew are better off if they specialize, because each has an **absolute advantage**. Karolyn is more efficient than Andrew at washing windows, and Andrew is more efficient than Karolyn at raking leaves. It's not difficult to convince anyone of the benefits of specialization and trade when there is a clear absolute advantage for each partner.

## Comparative Advantage

Suppose, however, that one partner is better at both. Assume that Karolyn is better at *both* window washing and leaf raking. The production rates for Karolyn and Andrew in this case are shown in Table 15.2. If they continue to divide the tasks equally, Karolyn will spend 1 1/2 hours on her 6 windows and 2 hours on 12 square yards of raking. She's through in just 3 1/2 hours. Poor Andrew, however, has to spend 6 hours on windows and 3 hours on leaves, for a total of 9 hours of work. Can Karolyn do something to make Andrew better off without spending any more of her own time working?

Table 15.2: An example of comparative advantage		
	Windows per hour	Square yards of leaves per hour
Karolyn	4	6
Andrew	1	4

If they decide to specialize, it's not quite as obvious who should specialize in what as it was in the previous example. The concept of opportunity cost provides an answer. When Karolyn rakes 6 square yards of leaves, she's giving up 4 clean windows she could have "produced" in that time. A clean window costs her 1 1/2 square yards of raking. For Andrew, a clean window costs 4 square yards of raking. Clearly, Karolyn's window washing is cheaper than Andrew's in terms of alternatives. Karolyn has a **comparative advantage** in window washing because her opportunity cost is lower in that activity than in the other one. Andrew also has a comparative advantage in raking, even though he has an absolute disadvantage in both activities. His opportunity cost of raking leaves is only 1/4 of a clean window per square yard, and Karolyn's is 4/6 or 2/3. So Andrew should specialize in that activity in which he has a comparative advantage, that is, in which his opportunity cost is lower.

Even though Karolyn is more efficient than Andrew at both tasks, they can increase their productivity by specializing on the basis of comparative advantage. Karolyn washes all the windows, which takes her 3 hours. Andrew rakes all the leaves, which takes him 6 hours. By specializing on the basis of comparative advantage, both of them are better off! They have produced the same "output" (clean windows and a leaf-free yard) with considerably less input. Karolyn saved 1/2 hour, and Andrew saved 3 hours. Both parties gained from specialization. They can use the time saved for leisure, or they can use the extra time to wash the neighbors' windows and rake the neighbors' leaves, getting more output out of the same amount of time spent.

The same principles that determine specialization for two individuals in simple situations apply to more complex situations involving individuals and firms in groups, regions, or nations. Trade between nations is also based on comparative advantage. By specializing, both parties can gain from trade.

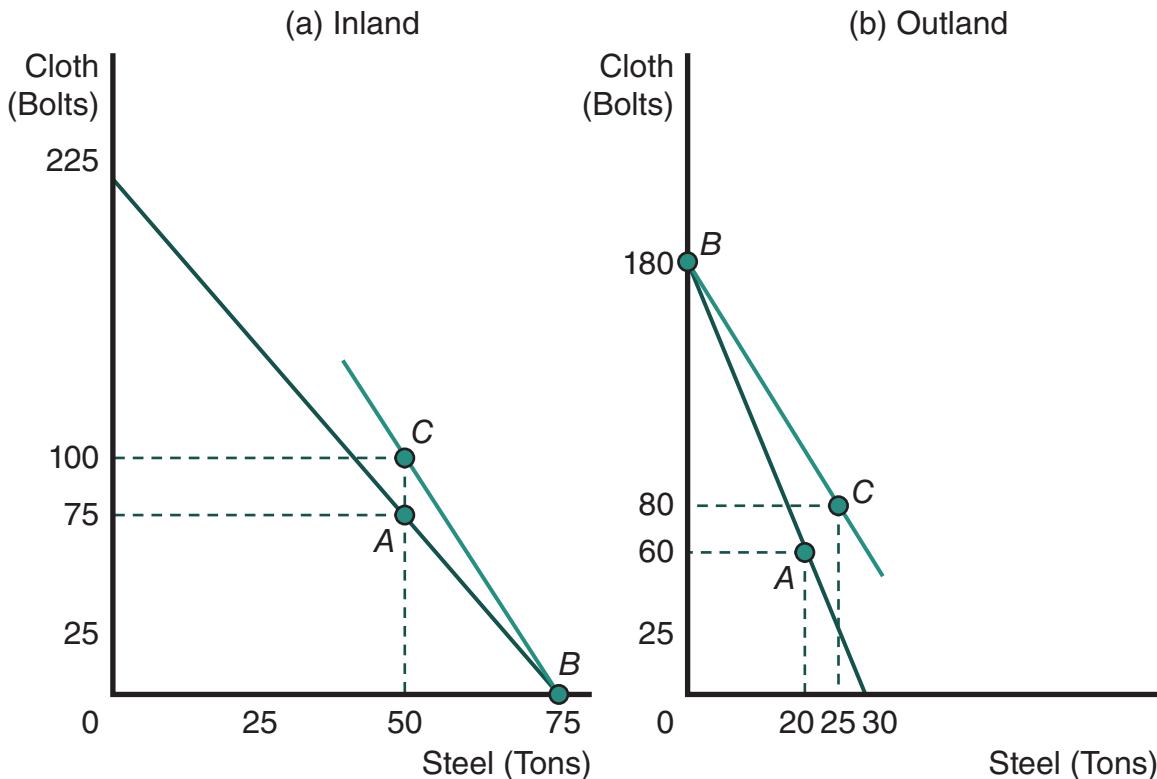
Suppose there are two countries called Inland and Outland. Before they discover one another, they are producing the products shown in Table 15.3. Outland, like Andrew, is able to produce less of both commodities. This lack of absolute advantage may be due to Outland's resources being less efficient, or Outland may just be a smaller or poorer country with fewer resources. The reason for absolute advantage or absolute disadvantage makes no difference for comparative advantage and the gains from trade.

**Table 15.3: Production in the absence of trade**

Country	Steel (tons)	Cloth (bolts)
Inland	50	75
Outland	20	60
World total	70	135

The output numbers for Inland and Outland in Table 15.3 represent points on their production possibilities curves. (To keep things simple, both production possibilities curves are assumed to be straight lines as in Chapter 3.) One more piece of information is needed in order to draw the straight-line production possibilities curve for each country. Assume that each country is devoting two-thirds of its resources to steel and one-third of its resources to cloth. This assumption makes it possible to calculate the end points of their production possibilities curves.

If Inland specializes in cloth, the country can produce 225 bolts. If it specializes in steel, it can produce 75 tons. If Outland specializes in cloth, the country can produce 180 bolts. If it specializes in steel, it can produce 30 tons. These points give the production possibilities curves in Figure 15.1.

**Figure 15.1: Production possibilities curves for inland and outland**

The production possibilities curve illustrates the gains from specializing on the basis of comparative advantage. Each country moves from pretrade production and consumption (Point A) to output with specialization (Point B) and then to consumption after trade (Point C).



Which country should specialize in which product? The answer lies in the two countries' opportunity costs. For Inland, the opportunity cost of producing 75 tons of steel is 225 bolts of cloth not produced, or 3 bolts of cloth per ton of steel. For Outland, the same calculation says that 1 ton of steel costs 6 bolts of cloth. Inland's steel is cheaper in terms of cloth forgone. Measuring the cost of cloth in terms of steel, on the other hand, gives these results: One bolt of Inland cloth costs  $1/3$  of a ton of steel, and one bolt of Outland cloth costs only  $1/6$  of a ton of steel. Measured in terms of opportunity costs, Outland's cloth is cheaper. The result of specialization is shown in Table 15.4.

Table 15.4: Production before and after specialization				
	Before specialization		After specialization	
Country	Steel (tons)	Cloth (bolts)	Steel (tons)	Cloth (bolts)
Inland	50	75	75	0
Outland	20	60	0	180
World total	70	135	75	180

Total world output has increased, without using additional resources, by 5 tons of steel and 45 bolts of cloth. Are the two countries better off? Not yet. After all, they could have been producing those combinations anyway. It is only after trade that they can be better off.

## The Terms of Trade

The rate at which Inland and Outland trade steel for cloth is called the **terms of trade**. Inland will not accept less than 3 bolts of cloth for a ton of steel, because this country can do that well producing its own cloth. Outland will not offer more than 6 bolts of cloth per ton of steel, because more than that would make it cheaper not to specialize. Anywhere between 3 and 6 bolts of cloth per ton of steel should be a mutually acceptable trading ratio. Let's make the terms of trade 4 bolts of cloth for 1 ton of steel. The terms of trade will always lie somewhere between the two trading parties' opportunity costs. Exactly where the terms of trade fall between those limits depends on the relative strength of demand for both products in both countries.

There are numerous after-trade combinations of steel and cloth that could make both countries better off. One possibility is to let Inland take all of its gains from trade in extra cloth, keeping its steel consumption at the original level of 50 tons and trading away the other 25 tons to Outland for 100 bolts of cloth. That exchange leaves Outland with 25 tons of imported steel and 80 bolts of domestic cloth, a consumption combination that represents more of both goods. The results of trade are summarized in Table 15.5.

Table 15.5: Gains from trade						
	Before specialization		After specialization		After trade	
Country	Steel (tons)	Cloth (bolts)	Steel (tons)	Cloth (bolts)	Steel (tons)	Cloth (bolts)
Inland	50	75	75	0	50	100
Outland	20	60	0	180	25	80
World total	70	135	75	180	75	180

These new consumption points are shown in Figure 15.1. Point C in graph (a) shows Inland consuming 50 tons of steel and 100 bolts of cloth. Point C in graph (b) represents a consumption combination of 25 tons of steel and 80 bolts of cloth for Outland. In each graph, this point lies along a “terms of trade” line, or a **consumption possibilities curve**, beginning at Point B (total production with specialization) and having a slope of 1/4 (1 steel to 4 cloth). Each country is able to get beyond its production possibilities curve by separating production (at Point B) from consumption (at Point C). The gains from trade are the same kinds of improvements in well-being that a country gets from having additional economic resources. Point C in each case represents one of many trade and consumption combinations that makes that partner better off.

## The Sources of Comparative Advantage

What makes Inland better at producing steel and Outland better at producing cloth? For some products, the reasons are obvious. Climate determines the cheapest place to produce bananas, potatoes, and other agricultural products. Mineral resources determine other production patterns. Some products use a high proportion of unskilled labor relative to capital and other inputs. These products will be produced in countries with relatively large amounts of low-cost, unskilled labor. Other products require relatively more skilled labor, capital, or fertile land. These products will be produced in countries where those resources are more abundant.

For many products, economies of scale are an important factor in being able to compete in a global market. If the world market is not large, there may be room only for a few suppliers who take advantage of cost savings in large-scale production. The first producer may enjoy a lasting advantage for that reason. Scale economies are especially important for large durable goods such as mainframe computers, aircraft, and heavy machinery. Consumers also benefit from economies of scale because lower costs mean lower prices.

All these factors may explain the existence of comparative advantage. Regardless of the source of comparative advantage, the important point is that it is possible for both partners to increase output and reduce prices to consumers by specializing on the basis of comparative advantage.



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**Climate can be a factor that determines where products are produced. Agricultural products, such as bananas, will be produced in countries with the appropriate climate and then exported to other areas.**

## Trade and Competition

Another important benefit from trade is increased competition. Trade increases the number of competing firms from whom consumers can buy, widening their range of choices of goods and suppliers. This benefit of trade can be very important if the domestic industry has only a few firms. For example, car buyers in the United States have a wide range of choices because of international trade, although there are only a few domestic producers. As a result of foreign competition, domestic producers have responded to demands of some car buyers for smaller, more fuel-efficient cars.

### 15.2 Tariffs and Quotas

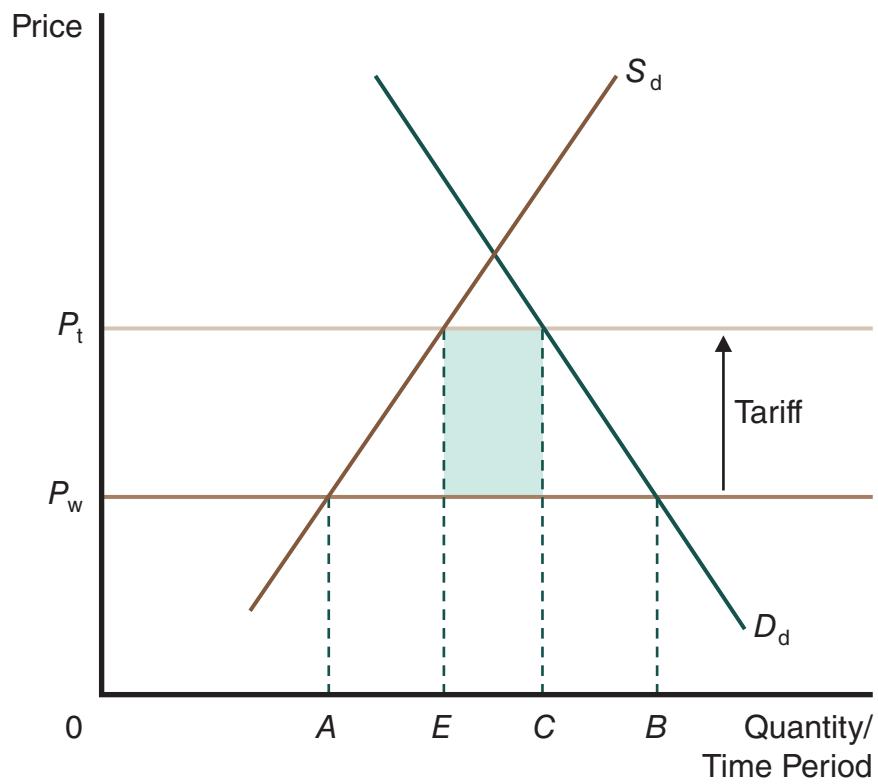
**W**ith all of these good reasons for free trade, why are some U.S. firms and industries protected from foreign competition? Many arguments are offered by firms that have to compete with imports, but most of these arguments come down to one reason—income distribution. A country as a whole benefits from free trade, but not everyone in the country benefits equally.

Protection of domestic industries is accomplished with two main tools: tariffs and quotas. A tariff is a tax on imported goods or services. The **tariff** can be specific (based on weight, volume, or number of units) or ad valorem (figured as a percentage of the price). The average U.S. tariff is less than 5%. Many items bear no tariff at all, and a few items have large tariffs.

A **quota** is a quantity limit. It specifies the maximum amount of a good or service that can be imported during a given time period (usually a year). Quotas can be global (limiting total imports of widgets from all foreign suppliers to 1,000 widgets per year) or geographic (assigning quotas to specific countries). Quotas also can be combined with tariffs in a **tariff quota**. In this case, a certain amount of a good from one country is allowed to enter another country without a tariff. For amounts in excess of that limit, a tariff is applied.

### Effects of a Tariff

Figure 15.2 illustrates the effects of a specific tariff. In this figure, Inland produces, consumes, and imports cheese. The domestic supply curve is  $S_d$ . The domestic demand curve is  $D_d$ . Because Inland is a small country, its purchases of imported goods do not affect the world price of those goods. Inland can buy all the cheese it wants at the world price,  $P_w$ . At  $P_w$ , domestic producers are producing  $A$  pounds and consumers are buying  $B$  pounds. The difference between production and consumption is imports of  $B - A$  pounds of cheese.

**Figure 15.2: Effects of a tariff or quota**

A tariff ( $T = P_t - P_w$ ) or an equivalent quota ( $C - E$ ) raises prices for domestic consumers (from  $P_w$  to  $P_t$ ), reduces imports (from  $B - A$  to  $C - E$ ), lowers consumption (from  $B$  to  $C$ ) and increases domestic output and sales (from  $A$  to  $E$ ).

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$P_t$  is the price of imported cheese after Inland imposed a tariff equal to  $T$ . Since the tariff drives up the price, consumers buy less. Cheese consumption falls to  $C$ . Domestic producers move up along their supply curve to  $E$ . They get a bigger share of the smaller market. Imports decrease from  $B - A$  to  $C - E$ .

Who gains? Domestic producers, including their owners, workers, and suppliers. These firms can charge a higher price and have a larger market share, which benefits everyone connected with them. Government also gains some tariff revenue. Who loses? Domestic consumers are paying more and getting less, so they lose. Foreign producers have lost sales. Also, the country imposing the tariff has given up some of the benefits of free trade noted earlier—more output, competition, and economies of scale. Since foreign cheese producers are more efficient than most of Inland's domestic cheese producers, this country is switching from more efficient to less efficient producers.

## Effects of a Quota

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Quotas are similar to tariffs. In fact, they can be represented by the same diagram. The main difference is that quotas restrict quantity, and tariffs work through prices. If, in Figure 15.2, the government imposed a quota in the amount of  $C - E$  on cheese, the effects on price, domestic production, consumption, and imports would be the same as those of the tariff  $T = P_t - P_w$ .

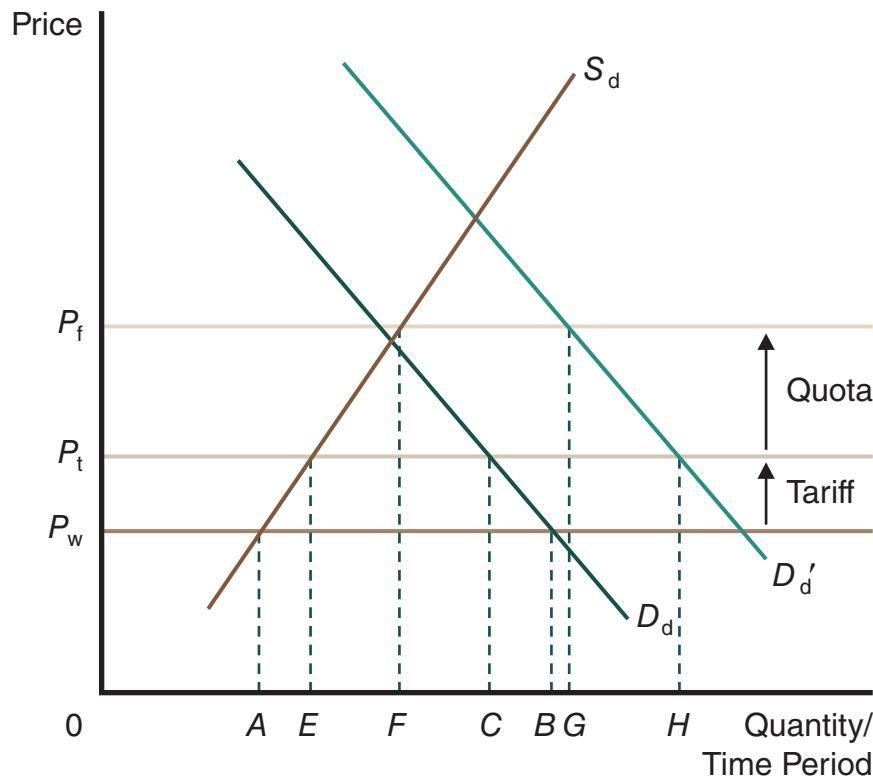
Quotas come in a number of forms. The limit may be placed on the physical quantity imported or the value of the product imported. A quota may be combined with a tariff so that a certain amount enters tariff-free, and imports over that amount are subject to a tariff. Or a quota may be negotiated with the exporting country on a “voluntary” basis in the form of voluntary export restraints, which is the kind of protection that the United States provided for steel and autos in the 1980s. Other than these two products, most U.S. quotas are for agricultural products, such as beef and sugar, and are linked to domestic farm programs.

## Differences Between Tariffs and Quotas

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Although Figure 15.2 seems to suggest that tariffs and quotas are very similar, there are some important differences. First, a tariff raises revenue for the government, in the amount of the nonshaded area in Figure 15.2. A quota generates no government revenue. All the benefits of a quota go to protected domestic producers and to those importers who manage to get the scarce and valuable import permits used to implement quotas. Permit holders can buy the good at the low foreign price and resell it at the higher domestic price. The difference between the price the importer pays the foreign supplier and the price the importer can charge the domestic consumer ( $P_t - P_w$ ) times the number of units imported is a monopoly profit that comes from having a license to import. Note that this monopoly profit is equal to the revenue the government would have received under a tariff.

Second, suppose demand increased in the country. With a tariff, the quantity of imports would increase. With a quota, only the price would increase. Originally, the tariff ( $T$ ) and the quota ( $C - E$ ) had the same effect on prices and quantities. As Figure 15.3 shows, however, when demand shifts from  $D_d$  to  $D'_d$  under a tariff, imports rise to  $H - E$  and consumption rises to  $H$ . With a quota, price rises to  $P_f$ . Imports remain the same ( $C - E = G - F$ ). Domestic production rises to  $F$  and consumption rises slightly to  $G$ .

**Figure 15.3: Effects of a tariff or quota when demand increases**

Under a tariff, any increase in demand increases the quantity of imports (from  $C - E$  to  $H - E$ ) and consumption (from  $C$  to  $H$ ) but leaves price unchanged at  $P_t$ . With a quota, increased demand leads to a rise in price for domestic consumers (from  $P_t$  to  $P_f$ ) and an increase in domestic production (from  $E$  to  $F$ ). Consumption rises slightly (from  $B$  to  $G$ ). Imports are unchanged ( $G - F = C - E$ ).

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Most economists prefer a policy of free trade to either tariffs or quotas. If they have to choose, they usually consider a tariff less harmful in terms of efficiency than an equivalent quota for some rather practical reasons. A tariff does allow imports to increase in response to increases in demand. Also, at least some of the tariff revenue goes to the government, which uses it to further the general welfare. Finally, a tariff is more visible and therefore easier to eliminate. Because a quota is less obvious, it is more likely to remain in place indefinitely.

### Check Point: Tariffs Versus Quotas

#### A tariff

- Raises prices
- Reduces imports and consumption
- Increases domestic output
- Produces government revenue
- Lets imports rise when demand increases

#### A quota

- Raises prices
- Reduces imports and consumption
- Increases domestic output
- Creates monopoly profits for those with import licenses
- Makes prices rise when demand increases

## Nontariff Barriers to Trade

In addition to tariffs and quotas, there are other kinds of government barriers to trade. Domestic laws or policies other than tariffs and quotas that interfere with the free exchange of goods and services across national borders are called **nontariff barriers**. Some of these barriers are intentional. One example is *domestic preference laws* (known as “Buy American” in the United States). These laws require the government to favor domestic suppliers when making purchases for government agencies and programs. Other nontariff barriers are laws or regulations enacted for domestic reasons that make it more difficult for foreign suppliers to compete. For example, it may be difficult for a foreign supplier to comply with U.S. safety standards and labeling requirements. A common form of nontariff barrier is requiring excessive paperwork that adds to costs and reduces profits for foreign suppliers and domestic importing firms. In France, a shortage of customs inspectors constitutes a nontariff barrier because it creates long delays and thus discourages imports.



Chris Cheadle/All Canada Photos/SuperStock

A well known investigation regarding antidumping regulations involved the United States and the Canadian lumber industry.

Sometimes nontariff barriers work the other way. Some U.S. laws and regulations make it more difficult for domestic firms to sell abroad. If American products must meet higher safety standards, for example, the American firm may not be able to compete with foreign producers who do not have to incur those costs.

An important nontariff barrier is antidumping codes. Dumping consists of selling a good at a lower price in a foreign country than in the firm's home country. Firms may dump abroad to get rid of surpluses, to take advantage of differences in elasticity of demand (price

discrimination), or to establish a foothold in a competitive market. Most countries, including the United States, have antidumping regulations that forbid this practice as unfair competition. If a foreign firm is accused of dumping (usually by a competing firm in the importing country), the International Trade Commission will hear the case and may impose a duty on the dumped good to counteract the price difference. The United States is not the only country that investigates dumping claims. Other countries also have anti-dumping regulations; as of 2012, there are 64 countries with antidumping laws or policies. The Canada–United States softwood lumber dispute is a well-known trade dispute in modern history, beginning in 2001 and lasting until the final ruling in 2009. The resulting Softwood Lumber Agreement was extended in 2012 to October 2015 (Crook, 2008). Reduction in other trade barriers both through negotiated tariff reductions and formation of free trade areas means that domestic producers increasingly turn to claims of dumping, valid or not, as their last defense against foreign competition.

## U.S. Commercial Policy

The set of actions that a country undertakes to deliberately influence trade in goods and services is its **commercial policy**. For most of its history, the United States has had high tariffs and other trade restrictions. The highest U.S. tariff ever was imposed by the Smoot–Hawley Act of 1930, an average charge of 53%.

Since 1934, the United States has greatly reduced tariffs and other trade barriers by negotiating treaties with other countries. Trade barriers were reduced under a series of Congressional acts, beginning with the Reciprocal Trade Agreements Act of 1934. Regular trade negotiations led to reductions in tariffs by the United States and its major trading partners through GATT (General Agreement on Tariffs and Trade), a multilateral process started in 1947. The GATT was replaced by the World Trade Organization (WTO) in 1995.

### Policy Focus: An Update on NAFTA

The North American Free Trade Area is a large single market made up of the United States, Canada, and Mexico, in which tariffs, quotas, and nontariff barriers on trade with each other were gradually eliminated. As of 2010, NAFTA is the largest trading bloc in the world in terms of combined GDP.

The NAFTA agreement greatly expanded the range of products that are traded freely between the United States and Mexico, as well as between Canada and Mexico. Organized labor in the United States, as well as in Canada, was strongly opposed to such an agreement. Labor leaders argued that Mexican firms enjoy an unfair advantage because they do not have to meet the environmental and safety standards that U.S. firms do. They pressed for supplementary agreements covering these issues.

So what has been the result of NAFTA after almost twenty years? According to *Industry Today*, by 2010 almost 700,000 jobs have been lost or displaced by a trade deficit of nearly \$100 billion (Scott, 2011). The tariff reductions were supposed to increase trade flows between member countries. Instead, a \$97.2 billion U.S. trade deficit with Mexico occurred in 2010—U.S. exports to Mexico totaled \$131.6 billion and imports were \$228.8 billion. Growing trade deficits such as this one usually result in trade-related job displacement and job losses.

## 15.3 Part Way to Free Trade: Free Trade Areas and Common Markets

In the last few decades the move toward lowering tariff barriers has taken a turn toward the formation of regional trading blocs. While the WTO negotiations have encouraged each nation to lower its barriers uniformly for all its trading partners, a trading bloc eliminates trade barriers only for selected countries. A **free trade area** consists of a group of countries that have agreed to eliminate trade barriers—tariffs, quotas, and nontariff barriers—among themselves, while retaining their own barriers to trade with the rest of the world. A **common market** is a much more closely knit trading bloc, in which nations eliminate not only trade barriers but also barriers to the flow of labor and capital among themselves. They also adopt a common external set of tariffs and quotas, and agree on other common policies, such as unemployment insurance, tax policy, and professional licensing.

### Trade Creation and Trade Diversion

From an economic perspective, there are some important differences between cutting your tariffs or quotas for all potential sellers and cutting barriers for just one or two countries. Suppose that the United States eliminates a tariff on imported shoes from Mexico as a result of establishing NAFTA, the North American Free Trade Agreement. Before, the United States may have been producing its own expensive shoes. Now, U.S. consumers have a choice of cheaper Mexican shoes. This gain in consumer welfare is the same as the gain from free trade. It results from changing suppliers from a higher-cost to a lower-cost source. When this happens, a free trade area or common market results in **trade creation**, which means shifting from a higher cost to a lower cost source of supply as a result of forming a trading bloc.

Trading blocs also can reduce welfare by limiting access to cheaper outside suppliers. Suppose, again, that the United States eliminates a tariff on Mexican shoes as a result of a free trade area. However, the United States keeps its tariff on shoes from other sources, such as Brazil, or even adopts the higher Mexican tariff on shoes from outside the free trade area. Suppose, further, that Brazil is even more efficient than Mexico at producing shoes. Before the free trade area, the United States was buying shoes from Brazil, even with the tariff. Now, Mexican shoes are artificially cheaper, and the United States switches suppliers to the higher-cost producer because of the free trade area. When a free trade area or common market results in shifting from a higher cost to a lower-cost source of supply as a result of forming a trading bloc, there is **trade diversion**.

### The European Community Evolves Into the European Union

The European Community began with six nations in 1957 and has expanded to 28 member states, as of July 2013, in a common market (now known as the European Union). In the 1960s, the original six nations eliminated tariffs and other trade barriers, merged their agricultural price support systems, and adopted a common domestic tax, the tax on value added. Gradually, other policies were brought into line, making it easy for capital and labor to move freely without worrying about such differences as health

and safety standards and social insurance benefits. EU citizens have a common passport and do not have to wait in long lines when going from one country to another. In 1992, after lengthy preparation, the EU took a leap forward. Three hundred directives reduced other barriers to a unified market, such as different labeling requirements and professional licensing standards.

One goal that eluded the EU initially was a common currency. Because of differences in national monetary policies, the attempt to establish a single currency was incredibly challenging. In 1990, Germany was so large in area, population, and GDP relative to the other member states that some of them feared German domination. Another obstacle was that several other countries were trying to join, which meant more differences would need to be resolved simply because the union would have more partners. In 1999, a monetary union was established among 17 of the EU member states to form the Eurozone, which uses a single currency, the Euro (€). Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia, and Spain all use the Euro as of 2012 (European Commission, 2012).

## 15.4 Movement of Resources: Immigration and Direct Investment

If trading countries benefit from the flow of goods and services, what about benefits from the flow of inputs? Labor, capital, and raw materials also move between countries. In general, the movement of inputs between countries can substitute for free movement of goods. If a country is poor in raw materials, capital, or skilled labor, it has two possible remedies: It can import goods that incorporate large quantities of those inputs, or it can import those inputs and produce its own final products. Both kinds of trade should bring benefits. In the absence of artificial barriers, market considerations determine which choice is more efficient—to move the final product or to move the input.

Outsourcing has also been a factor in the changing labor growth rates since the turn of the 21st century. Outsourcing (or offshoring) is when a company decides to contract an existing business process that was previously performed internally and pay another independent organization to take over that function. In today's terms in the United States, this usually means that jobs are being sent overseas because there is cheaper labor to be found there. A form of outsourcing is present in any modern economy, but the outsourcing of business functions gained popularity around 2000.



Image Source/Getty Images

There are positives and negatives associated with outsourcing. For example, some U.S. firms outsource certain services, such as IT phone support. This creates more job opportunities for foreign workers but fewer job opportunities for Americans.

When labor and capital move from country to country, you can count on objections from those who are threatened by foreign competition. Foreign competition is unpopular with the owners of productive resources, whether the competition is in product markets or in resource markets. Thus, these owners seek restrictions on the movement of resources as well as on the movement of goods.

Organized labor, for example, opposes immigration of workers and construction of plants abroad. Newly arrived workers compete for jobs and depress wages. An offshore plant of a U.S. firm means more jobs for foreign workers and fewer jobs for American workers. Domestic firms oppose letting their foreign competitors locate inside the country with no tariff wall for protection. Many U.S. citizens are unhappy about the purchase of U.S. banks, farmland, and resort islands by foreign firms and individuals, even when there are no obvious adverse consequences. For example, in 2006 when Dubai Ports World (DP World), owned by the United Arab Emirates (UAE), bought the British-owned Peninsular and Oriental Steam Navigation Company (P&O), the purchase gave Dubai Ports World control over facilities in six U.S. ports. Although many politicians were quick to object, the UAE was considered a U.S. ally and, thankfully, nothing has come of it (Kaplan, 2006).

#### Economics in Action: A Look at Global Inflation Risks

Patrick Dixon looks at how interest rate policies will change, and how those changes will challenge the global economy. Listen to his keynote address at the Global Change conference conference at <http://www.youtube.com/watch?v=v508u1weTsVBk>.

## Foreign Direct Investment

Recently, more attention has been focused on foreign direct investment (FDI), which is the investment made by a company or entity based in one country into a company or entity based in another country. An example would be an American company taking a majority stake in a company in China, or vice versa. According to the Organization for Economic Cooperation and Development, the acceptable threshold for an FDI relationship is 10%: the foreign investor owns at least 10% of the voting stock or shares of the foreign company. According to the U.S. Department of Commerce, foreigners invested \$236 billion in U.S. businesses and real estate in 2010 (Jackson, 2012). FDIs have become increasingly desirable to state and local governments that are struggling to create more jobs in their cities and states, although some are concerned about national and economic security issues.

#### Global Outlook: Floating Exchange Rates

One important difference that distinguishes trade between nations from trade within nations is that people in different countries use different currencies. To pay for goods purchased abroad, a buyer must acquire foreign currency. A system of floating exchange rates represents a pure market approach to foreign exchange, in which any shift in supply or demand will change the (continued)

### Global Outlook: Floating Exchange Rates (*continued*)

price of a nation's currency. This system had been tried by some countries, such as Canada, but was not widely adopted until 1973. In February 1973, the United States totally abandoned its commitment to fixed exchange rates and the gold standard. Japan quickly followed suit and allowed the yen to float against the dollar. Within a month, the finance ministers of the European Economic Community announced that they would allow their currencies to float. Most major industrial countries have had floating exchange rates since 1973.

Floating exchange rates work on the basic principles of supply and demand. Floating rates support all of the suggested goals for an international monetary system except stable exchange rates. If exchange rate adjustments clear the market, then the balance of payments should always be at or near equilibrium. Thus, there will be no need to shift the curves to intersect at a fixed price or to use restrictions in order to make international payments balance.

When countries first began to use floating exchange rates, there was widespread fear that the volume of trade would shrink because exchange rates would be very unstable. Traders would incur high costs to protect themselves against losses from exchange rate fluctuations. Although exchange rates have been unstable, well-developed forward markets have ensured that this instability does not discourage international trade. One serious problem has been that a currency's exchange rate may fall below its ultimate equilibrium before rising back to that equilibrium. In the interim, the exchange rate is still incorrect, but is too low instead of too high. During this time, price signals to importers, exporters, consumers, and producers are distorted. Decisions are made that would not be profit-maximizing at the correct exchange rate.

Floating rates have not resulted in annual balance of payments equilibrium. Why? Part of the problem is measurement, but another part reflects a basic truth about market equilibrium. Equilibrium is never where the market is, but rather the direction in which it is headed. If supply and demand shift often, the market may always be in the process of moving from one equilibrium to another. However, deficits and surpluses generally have been much smaller under floating rates than they were under fixed rates. In fact, the floating rate system has worked well during severe shocks (major supply and demand shifts), such as OPEC oil price hikes and the 2007–2009 U.S. financial crisis.

The floating rate system established in 1971 is not a completely free market in practice. A floating rate can be either clean or, more commonly, dirty. A clean float means that there is no government intervention to influence the currency's price. A dirty float implies some government involvement in the market to limit fluctuations. Governments continue to intervene in the market, buying and selling their own currency to limit swings in the price. For example, the People's Republic of China manipulated the value of its currency for decades to help increase the competitiveness of Chinese exporters and increase economic growth. As of 2012, the Yuan is still considered undervalued (Rapoza, 2012). Although many countries have not allowed the market alone to completely determine exchange rates, they are closer to doing so than ever before.



Photononstop/SuperStock

**The floating rate system is not a completely free market in practice. For example, the People's Republic of China manipulated the value of its currency for years to help increase the competitiveness of Chinese exporters and increase economic growth.**

## Immigration

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Immigration policy has been a source of much debate in the United States. North America alone has more than 45 million immigrants. Because the United States returned to tougher border security after September 11, 2001, immigration has become more difficult than ever, especially for Mexican immigrants, who make up the majority of those immigrating to the United States. Almost 8 million immigrants came to the United States from 2000 to 2005; almost half entered illegally. Mexico has been the leading source of new U.S. residents for more than 20 years. This pattern, along with an aging population, has led to a shifting demographic for the U.S. labor force. One of the major shifts is in the racial and ethnic makeup of the labor market: it will become much more diverse than it is now. The participation rate (percentage of the population that is employed or actively seeking employment) of Hispanics alone is projected to be 68.7% by 2020, with the black participation rate being 63.3% and Asian rate 65.7% (Toossi, 2006).

Organized labor has generally opposed raising or eliminating immigration quotas because it wants to protect jobs for U.S. citizens, especially during and after a recession like that of 2007–2009. However, owners of small manufacturing firms, large-scale farmers, hotel chains and other service establishments, and professionals in need of household help and child care see immigrants as a real boon because they are willing to work long hours for low wages. The immigrants themselves, for the most part, find a low-wage, unskilled job in the United States an improvement over the situation they left behind—especially if the situation they left was far worse.

In general, when unskilled workers migrate to the United States or other industrial countries, the owners of capital or firms in the United States and skilled workers in the United States benefit. These two groups will experience higher returns to their past investment in physical and human capital because unskilled labor is complementary to these other productive resources. Unskilled workers in the country of origin should also gain because they face less competition and may be able to earn higher wages. Owners of other productive resources in the country of origin are losers if they have less unskilled labor available. Finally, if the immigrants are more productive in the new country than the old one, and if these gains are not eaten up in the costs of getting the worker there and overcoming the cultural gap, the world as a whole may enjoy a higher standard of living.

## The Flow of Capital and Technology: Multinational Corporations

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An important influence on the movement of inputs as well as outputs is the multinational firm. A **multinational corporation** is a firm with headquarters in one country and plants in one or more other countries. Many large and well-known multinationals are headquartered in the United States, including Ford, General Motors, IBM, and AT&T. (So are many smaller and less-known ones.)

### *Why Firms Go Abroad*

Why do firms build plants in foreign countries? Why not just export or invest in a local firm that can produce the product? Exporting may not be feasible because of trade barriers, perishability, or a need to produce a product tailored to the local market. Investing in

a local firm by purchasing stock or making a loan is sometimes feasible. Often, however, the investing firm wants more control over management, product quality, or patented processes. Sometimes the only way to get access to local resources, especially raw materials, is to build a plant.

Trade barriers or the unique needs of foreign markets are common reasons for building foreign plants other than the attraction of cheap labor. Furthermore, U.S. workers have found jobs in the many plants in the United States owned by foreign multinationals, especially Japanese-owned firms. The lower wages and different management style of Japanese companies have meant adjustments not only for their American employees but also for their American competitors.

### *Effects of Multinationals*

Multinationals are accused by their critics of stifling competition in the countries in which they locate, creating balance of payments problems, and leading to unhealthy concentrations of economic and political power. Advocates argue that multinationals often increase competition, speed up the transfer of capital and technology, and help counteract artificial barriers to trade.

Probably the most serious concern about multinationals is that small countries are at a disadvantage in dealing with these large firms. Such a firm may have an annual revenue much larger than the host country's GDP. The multinational may be the largest employer, land owner, and taxpayer in a small country. A multinational represents a threat to the sovereignty of a host country when the firm is larger and more powerful than the government.

Despite these problems, there are real benefits to having multinationals. They provide a way for resources and technology to flow around trade and cultural barriers, which has been very beneficial to the world economy. In most cases, they promote the free trade goals of more output with less effort that were the concern of classical economists two centuries ago when they formulated the theory of comparative advantage.

## Summary

**C**onsider again... The future outcome on our world's trading policies may not be clear, but the heart of the matter is that economic relations with the rest of the world are vitally important to the U.S. economy. We now live in a country that relies on foreign products each and every day, from the cars we drive to the food we eat.

Our world has become one in many ways, and trading policies have played a hand in that. If the United States benefits from its trading blocs with Mexico and Canada, or the European Union benefits from forming an economic bond with its member nations, then economic good will come out of those relationships despite the ups and downs of any economy.

## Key Points

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1. Trade takes place because both parties benefit. Trade is based on the principle of comparative advantage, which means that each country produces that product for which its opportunity cost is lower in terms of other production. Specialization increases total output, and trade allows that increase to be shared. Trade also increases competition and allows countries to take advantage of economies of scale for some products.
2. Tariffs, quotas, and nontariff barriers interfere with free trade. A tariff or quota will raise the price, reduce imports, reduce consumption, and increase domestic production of the protected good.
3. Arguments for protection include protecting infant industries, national defense, balance of payments, employment, and cheap foreign labor. The first two have some validity but must be applied with caution. Most arguments for protection are really thinly disguised requests for income redistribution. The optimal tariff and the theory of the second best are two sophisticated arguments for tariffs.
4. Countries form free trade areas and common markets in order to get the benefits of limited free trade, especially benefits resulting from a larger market. Economic integration represents a movement toward free trade when there is trade creation, and a movement away from free trade when there is trade diversion.
5. Movements of resources can substitute for trade in goods and services. Immigrants usually gain, and world output increases, when workers migrate from areas where the productivity of labor is low to areas where it is higher. Multinational corporations increase the flow of technology and capital among nations. MNCs increase competition in some cases and decrease it in others.

## Key Terms

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**absolute advantage** The ability to produce something using fewer resources than other producers use.

**commercial policy** The set of actions that a country undertakes to deliberately influence trade in goods and services.

**common market** A free trade area with a common external tariff, free movement of capital and labor, and harmonization of social and economic policies.

**comparative advantage** The ability to produce something at a lower opportunity cost than other producers face.

**consumption possibilities curve** A line showing the consumption combinations attainable through trade.

**free trade area** An agreement between two or more countries to eliminate tariffs and other trade barriers on trade among themselves, while each country maintains its existing trade barriers to outside countries.

**gains from trade** The increase in economic well-being resulting from specialization and trade.

**multinational corporation** A firm with headquarters in one country and one or more subsidiaries in other countries.

**nontariff barriers** Trade restrictions other than tariffs or quotas.

**quota** A limit on the amount of a good or service that can be imported during a given time period.

**tariff** A tax on an imported good or service.

**tariff quota** A combination of a quota and a tariff that allows a certain amount of a good or service to be imported without paying a tariff and imposes the tariff on further imports.

**terms of trade** The ratio at which one product is exchanged for another.

**trade creation** Shifting from a higher-cost supplier to a lower-cost supplier as a result of forming a free trade area or common market.

**trade diversion** Shifting from a lower-cost supplier to a higher-cost supplier as a result of forming a free trade area or common market.

## Critical Thinking and Discussion Questions

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1. Who gains and who loses from a tariff? How do the effects of tariffs differ from the effects of quotas?
2. Why is an economy's consumption possibilities curve different from its production possibilities curve? How does a consumption possibilities curve help explain the benefits of trade?
3. How does a free trade area differ from a common market?
4. How is foreign direct investment defined and what is its magnitude in U.S. businesses and real estate?
5. What is dumping and why is it an unfair form of competition?
6. Why do multinational firms go abroad?
7. Why do economists generally prefer tariffs to quotas?
8. What is a nontariff barrier to trade? Provide a few examples from U.S. policy.
9. If a country has a comparative advantage in producing a good, must it also have the absolute advantage? Why or why not?
10. Assume that the United States can produce 3 cars or 3,000 pairs of shoes with one unit of resource, while Italy can produce 1 car or 2,000 pairs of shoes with one unit of resource. Could specialization and trade increase world output and consumption?
11. If you were running a small country, why might you feel threatened by a multinational corporation building a plant there? What are the possible benefits?
12. Why do nations join free trade areas? What costs might they incur?
13. Among those countries in the European Union, a large majority have now adopted a common currency (the euro). Is a common currency necessary for a common market? Why or why not?
14. Outsourcing has become increasingly common in recent years, particularly in service industries. Compare the costs and benefits to a nation whose businesses are engaged in outsourcing.
15. How has NAFTA impacted the U.S. economy? How has it impacted Mexico's economy? Which nation has likely benefitted more from this free trade area?

