CHAPTER 7

Comparative Advantage and the Gains from International Trade

Chapter Outline and Learning Objectives

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Is "Buying Canadian" a Good Idea for Your Community?

With unemployment rising and incomes falling through 2009 and 2010, many countries debated laws designed to limit the amount of foreign produced goods and services their citizens purchased. When the U.S. federal government tried to stimulate its economy in 2009, it included a "Buy American" provision intended to prevent companies based in other countries (including Canada) from participating in the government's planned infrastructure projects. The idea was that if other countries were prevented from participating in the U.S. economy, more jobs would be created for Americans. The U.S. wasn't the only country considering restricting international trade; China and Russia, for example, also limited trade.

Canada, in particular, advocated against the U.S. government's "Buy American" policy, arguing that the policy violated the North American Free Trade Agreement (NAFTA). The U.S. is Canada's biggest trading partner and trade (imports and exports) plays a massive role in the Canadian economy. Interestingly, Canada wasn't alone in lobbying against the "Buy American" policy. Caterpillar Inc., which produces heavy equipment for mining and construction and is based in Peoria, Illinois, also lobbied for free trade.

When one country prevents foreign countries from doing business in its domestic market, other countries tend to do the same. The result is a reduction in all economic activity around the world. When a country's firms are cut off from their markets, people lose their jobs and stop buying things.

In April 2013, Canada was raising the prospect of tariffs on American agricultural products in retaliation for labelling restrictions and other non-tariff barriers the U.S. has put on Canadian and Mexican exports of pork and beef. Some estimate the cost of the retaliatory measures at approximately $1 billion.

Are "Buy Canadian" and other policies designed to protect Canadian firms from foreign competition good ideas? As we will see in this chapter these policies create winners (the firms that are sheltered from international competition) and losers (Canadian consumers and Canadian firms trying to sell to foreign markets). In this chapter we will explore who wins and who loses from international trade and review some of the political debate over restricting international trade. There are trade-offs in government policies toward other countries.

AN INSIDE LOOK on **page 212** looks more closely at the Government of Canada's attempts to prevent restrictions on international trade.

Source: Michael Comte (AFP), "Canada Warns Against Protectionism," June 22, 2010, accessed at http://www.google.com/hostednews/afp/article/ALeqM5iHZZ-T1sFigbijwjkWBfiXCE57PA

Economics in Your Life

Have You Ever Been Urged to "Buy Canadian"?

Politicians often support restrictions on trade to convince people to vote for them. The workers in the industries these restrictions protect are likely to vote for the politicians because the workers think trade restrictions will protect their jobs. But most people are not workers in industries protected from foreign competition by trade restrictions. Many people work for firms that sell goods or services in foreign markets. These workers risk losing their jobs if foreign countries retaliate against Canadian attempts to reduce the number of imported goods we consume. In the case of "Buy Canadian" arguments, millions of consumers would have to accept higher prices for Canadian-made electronics, cars, clothes, and many other goods if foreign-made goods were excluded from the market. How do politicians become convinced to restrict international trade? As you read the chapter, see if you can answer this question. You can check your answer against the one we provide on page 211 at the end of the chapter.

Trade is simply the act of buying or selling. Is there a difference between trade that takes place within a country and international trade? Within Canada, domestic trade makes it possible for people in Saskatchewan to eat salmon farmed in New Brunswick, or for people in the Northwest Territories to drive cars made in Ontario. Similarly, international trade makes it possible for consumers in Canada to drink wine from France or watch movies made in Hollywood on a Blu-ray player manufactured in Japan. One significant difference between domestic trade and international trade is that international trade is more controversial. At one time, most of the things Canadians bought—televisions, toys, shoes, food, cars, etc.—were produced in Canada. Today, these goods are produced mainly by firms in other countries. This change has benefited Canadian consumers because we are able to purchase the things we want either more cheaply or at a higher quality than before. At the same time, many Canadian firms that produced these goods have gone out of business, and their workers have had to search for other jobs. It isn't surprising that people who support reducing international trade do so because they believe less international trade will mean more Canadian jobs. But is this belief correct?

We can use the tools of demand and supply we developed in Chapter 3 to analyze markets for internationally traded goods and services. We saw in Chapter 2 that trade in general—whether between next-door neighbours or between countries—is based on the principle of comparative advantage. In this chapter, we look more closely at the role of comparative advantage in international trade. We also introduce and use the concepts of consumer surplus, producer surplus, and deadweight loss to analyze government policies that restrict trade. With this background we can return to the political debate over whether Canada benefits from international trade. We begin by looking at how large a role international trade plays in the Canadian economy.

7.1 LEARNING OBJECTIVE
Discuss the role of international trade in the Canadian economy.

Canada and the International Economy

International trade has grown tremendously over the past 50 years. The increase in trade is the result of decreased costs of shipping products around the world, widespread availability of inexpensive and reliable communications, and changes in government policies. Firms can use large container ships to send their products around the world at low cost. Businesspeople today can travel to Europe or Asia using fast, inexpensive, and reliable air transportation. The Internet, cell phones, email, and text messaging allow managers to communicate instantly and at a very low cost with customers and suppliers all over the globe. These and other improvements in transportation and communication have created a global marketplace that earlier generations would have found hard to imagine.

Tariff A tax imposed by a government on imports.

Imports Goods and services bought domestically but produced in other countries.

Exports Goods and services produced domestically but sold in other countries.

In addition, over the past 50 years, many governments have changed policies to facilitate international trade. For example tariff rates have fallen. A **tariff** is a tax imposed by a government on *imports* of a good into a country. **Imports** are goods and services bought domestically but produced in other countries. In the 1930s, tariffs of 50 percent of the value of a product, or more, were common. Now tariffs are much lower, if they exist at all. Most tariffs among Canada, the United States, and Mexico were eliminated in the North American Free Trade Agreement (NAFTA) signed in 1994. Twenty-seven countries in Europe have formed the European Union, which has eliminated most tariffs among member countries, greatly increasing both imports and *exports*. **Exports** are goods and services produced domestically but sold in other countries.

The Importance of Trade to the Canadian Economy

International trade has always been an important part of the Canadian economy. When the country was first colonized by Europeans, furs and agricultural products were exported and consumer goods were imported. Canadians today buy a remarkable

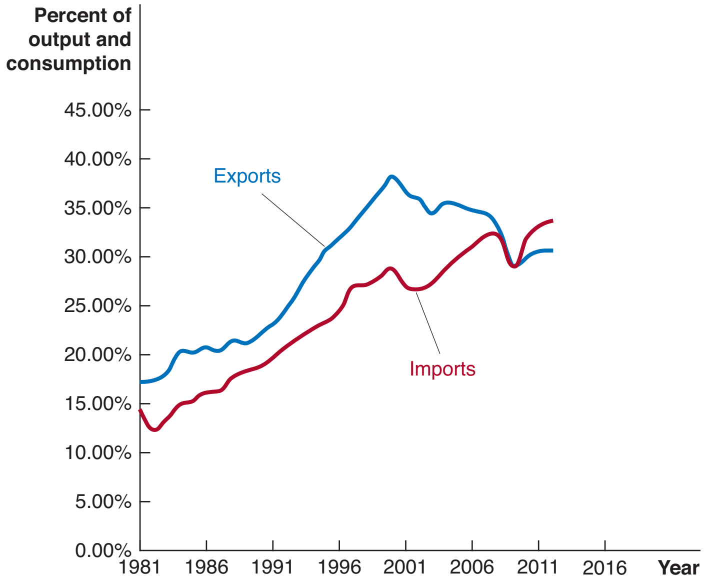


Figure 7.1

Canadian Imports and Exports as a Percent of GDP

Source: Data from Cansim Table 380-0002.

quantity of goods and services produced in other countries. Take a look at the tags on your clothes; the odds are good that what you're wearing was not made in Canada. At the same time, Canadian firms sell large quantities of goods and services to consumers in other countries. Figure 7.1 shows that even after the large drop-off that occurred between 2000 and 2009, we export and import a greater share of the goods and services we produce and consume than we did in the past. Currently, about one third of what we produce is sold to other countries, and one third of what we spend our money on comes from other countries.

Canadian International Trade in a World Context

Relative to other countries—like the U.S., Germany, and China—Canada's exports are small. The single biggest exporter in the world is China, followed by the United States and Germany. Figure 7.2 illustrates Canada's place in relation to other world exporters. Even though exports account about for 30 percent of what we produce, Canada's exports are 2.5 percent of international exports.

China has only recently surpassed Germany and the United States to become the world's largest exporter. Despite remaining a country with relatively poor regions, China is also one of the world's largest economies.

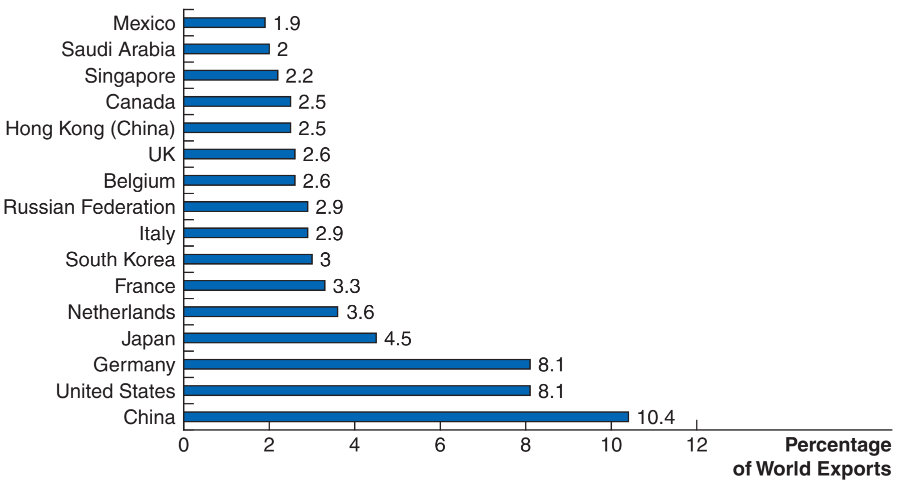


Figure 7.2

World Exports by Country

Source: Data from World Trade Organization, International Trade Statistics 2012.

Figure 7.3

Exports and Imports as a Share of the Economy

Source: Data from OECD Country Statistical Profiles 2010.

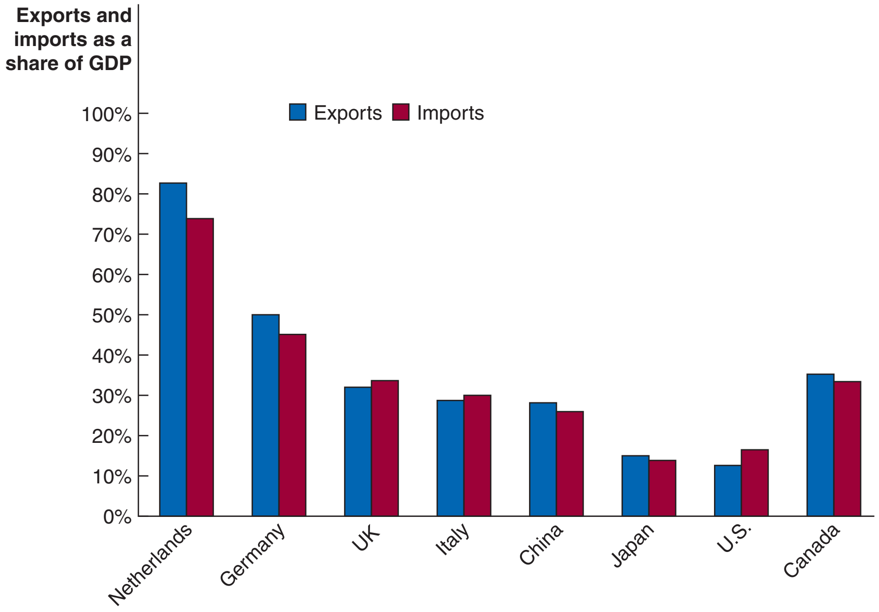


Figure 7.3 shows the importance of exports and imports to the economies of different countries. The Netherlands is remarkably dependent on markets outside its own borders, doing most of its trade with other European countries. Trade plays a much smaller role in the U.S. and Italian economies. Even though the U.S. is the world's second biggest exporter, its exports only account for about 13 percent of what it produces. Exports and imports play a relatively large role in the Canadian economy, with exports accounting for roughly one third of everything we produce and imports accounting for about one third of what we spend our money on.

7.2 LEARNING OBJECTIVE

Understand the difference between absolute and comparative advantage in international trade.

Comparative Advantage in International Trade

Why have businesses around the world increasingly looked for markets in other countries? Why have consumers increasingly purchased goods and services made in other countries? People trade for one reason: Trade makes them better off. Whenever a buyer and seller voluntarily agree to a sale, they must both believe they will be better off; otherwise, they wouldn't agree to trade. This outcome must hold whether the buyer and the seller live in the same city or in different countries. As we will see, governments are more likely to intervene to prevent international trade than trade between citizens. We'll see that the reasons for this are generally political, not economic.

A Brief Review of Comparative Advantage

Comparative advantage The ability of an individual, a firm, or a country to produce a good or service at a lower opportunity cost than competitors.

Opportunity cost The highest-valued alternative that must be given up to engage in an activity.

In Chapter 2, we discussed the key economic concept of *comparative advantage*. **Comparative advantage** is the ability of an individual, firm, or country to produce a good or service at a lower opportunity cost than others. Recall that **opportunity cost** is the highest-valued alternative that must be given up to engage in an activity. People, firms, and countries specialize in economic activities in which they have a comparative advantage. In trading we benefit from the comparative advantage of others and they benefit from our comparative advantage.

A good way to think of comparative advantage is to recall the example in Chapter 2 about you and your neighbour picking fruit. You and your neighbour both have both apple and cherry trees on your property, and you pick your apples and trade them for her cherries. Your neighbour is better at picking both types of fruit than you are. Why, then, wouldn't your neighbour be better off by picking all her own fruit and ignoring

	Output per Hour of Work	
	Cell Phones	Televisions
Canada	4	2
South Korea	6	12

Table 7.1

An Example of South Korean Workers Being More Productive Than Canadian Workers

you? The opportunity cost of picking apples is very high for her: she is very good at picking cherries and every hour spent picking apples means she has to give up all the cherries she could have picked. You can pick apples at a much lower opportunity cost than your neighbour, so you have a comparative advantage in picking apples. Your neighbour can pick cherries at a much lower opportunity cost than you can, so she has the comparative advantage in picking cherries. You both are better off if you specialize in picking apples and she specializes in picking cherries. You can then trade her some apples for some cherries, and in the end you both end up with more of each type of fruit.

Comparative Advantage in International Trade

The principle of comparative advantage can explain why people pursue different occupations. It can also explain why countries produce different goods and services. International trade involves many countries importing and exporting many different goods and services. The people in these countries are better off if they specialize in producing the goods for which they have a comparative advantage and trading for the goods in which other countries have a comparative advantage.

We can illustrate why specializing on the basis of comparative advantage makes people in different countries better off with a simple example involving just two countries and two products. Suppose Canada and South Korea can produce only cell phones and televisions. Assume that each country uses only labour to produce each good and that Canadian and South Korean cell phones and televisions are exactly the same. Table 7.1 shows how much of each good these countries can produce with one hour of labour.

Notice that Korean workers are more productive than Canadian workers in making both goods in this example. In one hour of work, Korean workers can make six times as many televisions and one and one-half times as many cell phones as Canadian workers. South Korea has an *absolute advantage* over Canada in producing both goods. **Absolute advantage** is the ability to produce more of something than others when using the same amount of resources. In this case, South Korea can produce more of both goods using the same amount of labour as Canada.

Absolute advantage The ability to produce more of a good or service than competitors when using the same amount of resources.

It might seem at first that Koreans have nothing to gain from trading with Canadians because they have an absolute advantage in producing both goods. However, South Korea should specialize and produce only televisions and get the cell phones it wants by exporting televisions to Canada and importing Canadian cell phones. The reason that Koreans benefit from trade is that although they have an absolute advantage in producing both goods, they have a *comparative advantage* only in the production of televisions. Canada has the comparative advantage in producing cell phones.

If it seems counterintuitive that Koreans should import cell phones from Canada even though they can produce more cell phones per hour of work, think about the opportunity cost to each country of producing each good. If Koreans want to produce more cell phones, some workers have to stop making televisions. Every hour of labour switched from producing televisions to producing cell phones increases cell phone production by 6, but reduces television production by 12. Koreans have to give up 12 televisions for every 6 cell phones they produce. Therefore, the opportunity cost to Koreans of a cell phone is 12/6, or 2 televisions per cell phone.

If a Canadian spends one hour fewer making televisions to spend that hour making cell phones, television production falls by 2, and production of cell phones rises by 4. Therefore, the opportunity cost to Canadians of producing one more cell phone is 2/4, or 0.5 televisions per cell phone. Canadians have a lower opportunity cost of producing cell phones and, thus, have a comparative advantage in producing cell phones.

Table 7.2

The Opportunity Costs of Producing Cell Phones and Televisions

	Opportunity Costs	
	Cell Phones	Televisions
Canada	0.5 televisions	2 cell phones
South Korea	2 televisions	0.5 cell phones

By similar reasoning we can see that Koreans, in this example, have a comparative advantage in producing televisions. Table 7.2 summarizes the opportunity costs people in each country face in producing televisions and cell phones. For example, the entry in the first row and second column shows that Canada must give up 2 cell phones for every television it produces.

7.3 LEARNING OBJECTIVE

Explain how countries gain from international trade.

How Countries Gain from International Trade

Can Koreans really gain from producing only televisions and trading with Canadians for cell phones? To see that they can, assume first that Koreans and Canadians don't trade with each other. A situation in which a country doesn't trade with other countries is called **autarky**. Assume that in autarky the citizens of each country have 1,000 hours of labour available to produce the two goods, and produce the quantities shown in Table 7.3. As there is no trade between countries, these quantities also represent the consumption.

Autarky A situation in which a country does not trade with other countries.

Increasing Consumption Through Trade

Suppose now that Koreans and Canadians begin to trade with each other. The **terms of trade** is the ratio at which one country's exports trade for imports from other countries. For simplicity, let's assume that the terms of trade end up with Koreans and Canadians trading one cell phone for one television.

Terms of trade The ratio at which a country can trade its exports for imports from other countries.

Once trade has begun, Canadians and Koreans can exchange cell phones for televisions or televisions for cell phones. For example, if Koreans specialize by using all available 1,000 hours to produce televisions they will be able to produce 12,000. Koreans could then export 1,500 televisions to Canada in exchange for 1,500 cell

Table 7.3

Gains from Trade for Canada and South Korea

	Without Trade	
	Production and Consumption	
	Televisions	Cell Phones
Canada	1,500	1,000
South Korea	9,000	1,500

	With Trade					
	Production		Trade		Consumption	
	Televisions	Cell Phones	Televisions	Cell Phones	Televisions	Cell Phones
Canada	0	4,000	**Import** 1,500	**Export** 1,500	1,500	2,500
South Korea	12,000	0	**Export** 1,500	**Import** 1,500	10,500	1,500

	Gains from Trade: Increased Consumption
Canada	1,500 cell phones
South Korea	1,500 televisions

phones. (Remember we assumed that the terms of trade were one cell phone per television.) Koreans end up with 10,500 televisions and 1,500 cell phones. Compared with autarky (the situation before trade), Koreans have the same number of cell phones, but 1,500 televisions. If Canadians specialize in producing cell phones, they will be able to produce 4,000. They could then export 1,500 cell phones in exchange for 1,500 televisions. Canadians end up with 2,500 cell phones and 1,500 televisions. Compared with autarky, Canadians get the same number of televisions, but more cell phones. Trade has allowed the people of both countries to increase the quantities of both goods they get to consume. Table 7.3 summarizes the gains from trade for Canadians and Koreans.

By trading, Koreans and Canadians are able to consume more than they could without trade. This outcome is possible because world production of both goods increases after trade. (Remember, in this example, our world consists of just South Korea and Canada.)

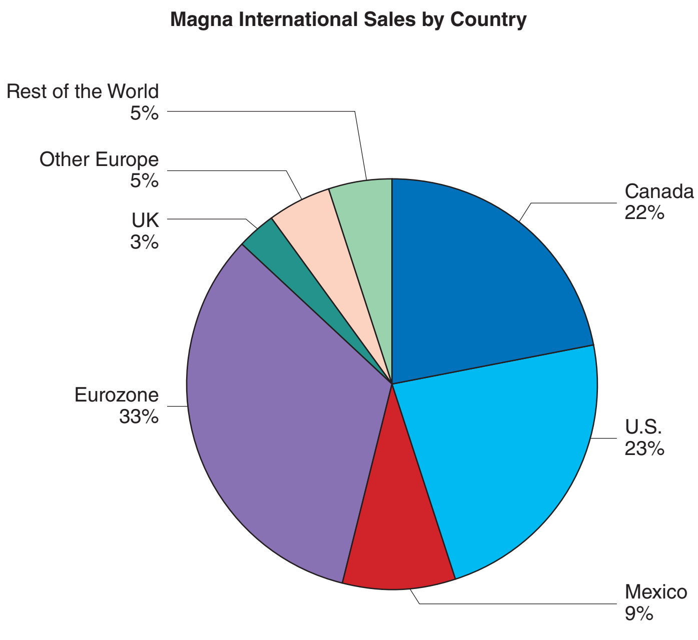
Why does total production of cell phones and televisions increase when Canadians specialize in producing cell phones and Koreans specialize in producing televisions? A domestic analogy helps to answer this question: If a company shifts production from an old factory to a more efficient modern factory, its output will increase. In effect the same thing happens in our example. Producing televisions in Canada and cell phones in Korea is inefficient. Shifting production to the more efficient country—the one whose people have a comparative advantage—increases total production. The key point is this: *People in different countries gain from specializing in producing goods in which they have a comparative advantage, and trading for goods in which people in other countries have a comparative advantage.*

Making the Connection

Magna International Depends on International Trade

You may not have heard of Magna International, but you've probably seen its products. This maker of auto parts has its headquarters in Aurora, Ontario, and employs almost 55,000 people in North America alone. You might think that a company like Magna would be interested in having the Canadian or North American auto parts market protected from foreign competition, but such a move would likely be very damaging to Magna and its employees. If the Canadian or North American auto parts market were closed to foreign firms, other countries would likely respond by preventing Magna from selling parts in their markets. You see, Magna doesn't just make parts for the North American automakers, GM, Fiat/Chrysler, and Ford; Magna also makes parts for BMW, Volkswagen, and Daimler.

You can see from the graph that Magna sells just 54 percent of what it makes in North America (only 22 percent in Canada). The remaining 46 percent is sold to other countries. In fact, if just the European markets were closed to Magna, it would lose over 40 percent of its sales. If Magna were to lose access to markets outside Canada or North America, it would have to lay off many of its Canadian workers. Companies like Magna and their employees clearly benefit from international trade.



Source: Data from Magna International 2010 Annual Report.

Your Turn: Test your understanding by doing related problem 3.1 on page 215 at the end of this chapter. MyEconLab

Solved Problem 7.3

Gains from Trade

The first discussion of comparative advantage appears in *On the Principles of Political Economy and Taxation*, a book written by David Ricardo in 1817. Ricardo provided a famous example of the gains from trade, using wine and cloth production in Portugal and England. The following table is adapted from Ricardo's example, with cloth measured in sheets and wine measured in kegs.

	Output per Year of Labour	
	Cloth	Wine
Portugal	100	150
England	90	60

a. Explain which country has an absolute advantage in the production of each good.

b. Explain which country has a comparative advantage in the production of each good.

c. Suppose that Portugal and England currently do not trade with each other. Each country has 1,000 workers, so each has 1,000 years of labour time to use producing cloth and wine, and the countries are currently producing the amounts of each good shown in the following table.

	Total Current Output	
	Cloth	Wine
Portugal	18,000	123,000
England	63,000	18,000

Show that Portugal and England can both gain from trade. Assume that the terms of trade are that one sheet of cloth can be traded for one keg of wine.

d. Which workers in Portugal will have to change jobs? Which workers in England will have to change jobs?

Solving the Problem

Step 1: **Review the chapter material.** This problem is about absolute and comparative advantage and the gains from trade, so you may want to review the section "Comparative Advantage in International Trade" and the section "How Countries Gain from International Trade."

Step 2: **Answer part (a) by determining which country has an absolute advantage.** Remember that a country has an absolute advantage over another country when it can produce more of a good using the same resources. The first table in the problem shows that Portugal can produce more cloth *and* more wine with one year's labour than England can. Thus, Portugal has the absolute advantage in the production of both goods and, therefore, England does not have an absolute advantage in the production of either good.

Step 3: **Answer part (b) by determining which country has a comparative advantage.** A country has a comparative advantage when it can produce a good at a lower opportunity cost. To produce 100 sheets of cloth, Portugal must give up 150 kegs of wine. Therefore, the opportunity cost to Portugal of producing 1 sheet of cloth is 150/100, or 1.5 kegs of wine per sheet of cloth. England has to give up 60 kegs of wine to produce 90 sheets of cloth, so its opportunity cost of producing 1 sheet of cloth is 60/90, or 0.67 kegs of wine per sheet of cloth. The opportunity cost of producing wine can be calculated in the same way. The following table shows the opportunity cost to Portugal and England of producing each good.

	Opportunity Costs	
	Cloth	Wine
Portugal	1.5 kegs of wine	0.67 sheets of cloth
England	0.67 kegs of wine	1.5 sheets of cloth

Portugal has a comparative advantage in wine because its opportunity cost is lower. England has the comparative advantage in cloth as it has the lower opportunity cost.

Step 4: Answer part (c) by showing that both countries can benefit from trade. By now it should be clear that both countries will be better off if they specialize where they have a comparative advantage and trade for the other product. The following table is very similar to Table 7.3 and shows one example of trade making both countries better off. (To test your understanding, construct another example.)

Without Trade

	Production and Consumption	
	Cloth	Wine
Portugal	18,000	123,000
England	63,000	18,000

With Trade

	Production		Trade		Consumption	
	Cloth	Wine	Cloth	Wine	Cloth	Wine
Portugal	0	150,000	**Import** 18,000	**Export** 18,000	18,000	132,000
England	90,000	0	**Export** 18,000	**Import** 18,000	72,000	18,000

Gains from Trade: Increased Consumption

Portugal	9,000 cloth
England	9,000 wine

Step 5: Answer part (d) by considering the changes in production. As Portugal is specializing in the production of wine, Portuguese weavers will have to learn how to make wine. As England is specializing in making cloth, English wine makers will have to learn how to weave.

Your Turn: Test your understanding by doing related problems 3.2 and 3.3 on pages 215 and 216 at the end of this chapter.

MyEconLab

Why Don't We Observe Complete Specialization?

In our example of two countries producing only two products, each country specializes in producing one of the goods. In the real world, many goods and services are produced in more than one country. For example, Canada and South Korea both produce cars. We do not see complete specialization in the real world for three main reasons:

- **Not all goods and services are traded internationally**. Even if, for example, South Korea had a comparative advantage in the production of medical services, it would be difficult for South Korea to specialize in producing medical services and exporting them. There is no easy way for Canadian patients who need appendectomies to receive them from a surgeon in South Korea.
- **Production of most goods and services involves increasing opportunity costs**. Production of most goods involves increasing opportunity costs. As a result, when Canada devotes more workers to producing cell phones, the opportunity cost of producing more cell phones will increase. At some point, the opportunity cost of producing cell phones in Canada may rise to the level of opportunity cost of producing them in Korea. When that happens, international trade will no longer push Canada further toward complete specialization. The same will be true of South Korea: Increasing opportunity cost will cause South Korea to stop short of complete specialization in televisions.
- **Tastes for products differ**. Most products are *differentiated*. Cell phones, televisions, cars, and wine—to name a few products—come with a wide variety

of features. When buying cars, some people look for reliability and fuel efficiency, others look for room to carry seven passengers, and still others want styling and performance. As a result of different tastes, some people will want a Toyota Prius, others SUVs, and still others a BMW, allowing Canada, the U.S., Germany, and Japan each to have a comparative advantage in producing different types of cars.

Does Anyone Lose as a Result of International Trade?

In our cell phone and television example, consumption increases for people in both Canada and South Korea as a result of trade. Everyone gains, and no one loses. Or do they? In our example we talked about people in different countries producing goods, and they could simply switch from producing one good to another. This isn't always how it happens. Keeping with the example, the Korean firms that were making cell phones would likely go out of business and their workers would lose their jobs. Making a transition from working in one industry to another isn't easy and can take a long time. The owners of the Korean cell phone firms also lose when trade occurs. Just like everything else in life, there are costs to trade. The people who face these costs are likely to do their best to convince their government not to allow international trade.

Don't Let This Happen to You

Remember That Trade Creates BOTH Winners and Losers

International trade is often referred to as a "win–win situation" as both countries benefit from trade. People sometimes take statements like this to mean that there are no losers from international trade. But notice that the statement refers to countries and not to individual people. When countries participate in trade, they make consumers there better off by increasing the quantity of goods and services available to them. As we have seen, expanding trade eliminates the jobs of workers employed at companies that are less efficient than foreign companies. Trade also creates new jobs at companies that export to foreign markets. It is often difficult for workers who lose their jobs because of trade to find a new job in an industry that is growing due to trade. That's why the federal and provincial governments have sponsored programs designed to help people who lose their jobs to develop new skills in fields that are expanding due to trade. Such programs—and those like them in other countries—recognize that international trade has costs as well as benefits.

MyEconLab

Your Turn: Test your understanding by doing related problem 3.7 on page 216 at the end of this chapter.

Where Does Comparative Advantage Come From?

Some of the main sources of comparative advantage are:

- **Climate and natural resources.** This source of comparative advantage is the most obvious. Because of geology, Alberta has a comparative advantage in producing oil. Due to climate and soil conditions, Costa Rica has a comparative advantage in producing bananas.
- **Relative abundance of labour and capital.** Some countries, such as Canada, have highly skilled workers and a great deal of machinery. Other countries, such as Vietnam, have many unskilled workers and relatively little machinery. As a result, Canada has a comparative advantage in producing goods that require highly skilled workers and/or machines—things like aircraft, car parts, cell phone designs, and so on. Vietnam has a comparative advantage in producing goods, such as clothing or children's toys, that require unskilled workers and relatively few machines.
- **Technology.** Broadly defined, *technology* is the process firms use to turn inputs into goods and services. At any given time, firms in different countries do not all have access to the same technologies. In part, this difference is the result of past

investments countries have made in supporting higher education or in providing support for research and development. Some countries are strong in *product technologies,* which involve the ability to develop new products. For example, firms in the U.S. have pioneered the tablet computer. Other countries are strong in *process technologies*, which involve the ability to improve the processes used to make existing products, For example, Japanese firms such as Toyota and Honda have succeeded by greatly improving the processes for designing and manufacturing cars.

- **External economies.** It is difficult to explain the location of some industries on the basis of climate, natural resources, the relative abundance of labour and capital, or technology. For example, why does California's "silicon valley" have a comparative advantage in computer software design, or Toronto in providing banking services, or Switzerland in making watches? The answer is that once an industry becomes established in an area, firms that locate in that area gain advantages over firms located in other places. The advantages might include the availability of skilled workers, the opportunity to interact with other firms in the same industry, and proximity to suppliers. These advantages result in lower costs to firms located in the area. Because these lower costs result from increases in the size of the industry in an area, economists refer to them as **external economies**.

External economies Reductions in a firm's costs that result from an increase in the size of an industry.

Comparative Advantage over Time: The Rise and Fall of North American Manufacturing

A country may develop a comparative advantage in the production of a good, and then, as time passes and circumstances change, the country may lose its comparative advantage. For decades North American firms dominated global manufacturing. This was particularly true of early electronics; the best radios, televisions, and stereos were made in Canada and the United States. The comparative advantage for the United States arose because much of the original research that makes these goods possible was done in the U.S., and because North America had some of the best factories and one of the most skilled labour pools in the world. Gradually, other countries (Japan in particular) gained access to the technology, built modern factories, and developed the skilled work force necessary for the manufacture of consumer electronics. As mentioned earlier, Japanese firms have excelled in process technologies, which involve the ability to improve the processes used to make existing products. By the 1970s and 1980s, Japanese firms were able to produce better and cheaper products than their North American competitors. The comparative advantage in consumer electronics shifted to Japan.

Recently, the development of a new generation of consumer electronics has allowed North American firms to regain a comparative advantage. The iPad developed by Apple was the first commercially successful tablet computer. For years, BlackBerry dominated the business cell phone/smart phone market. These new products are based in large part on North America's new comparative advantage in computer and software design.

Once a country has lost its comparative advantage in producing a good, its people will have higher incomes (on average) and its economy will be more efficient if it switches from producing the good to importing it, as Canada has done with most older style electronic devices. As we will see in the next section, however, there is often political pressure on governments to attempt to preserve industries that have lost their comparative advantage.

Government Policies That Restrict International Trade

7.4 LEARNING OBJECTIVE

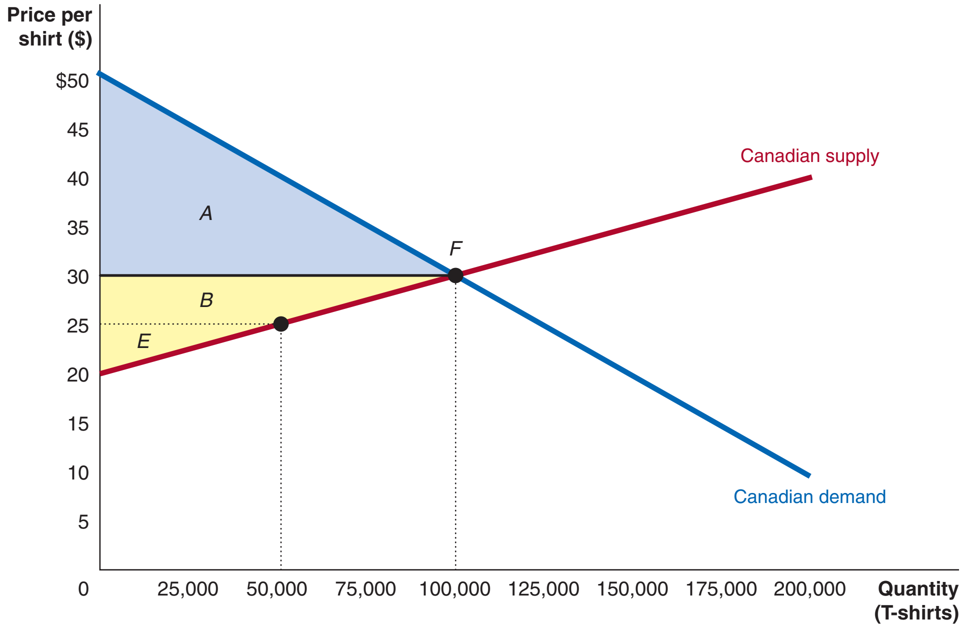
Analyze the economic effects of government policies that restrict international trade.

Free trade, or trade between countries that is without government restrictions, makes consumers better off. To expand on this idea we need to review the concepts of *consumer surplus* and *producer surplus*.

Free trade Trade between countries that is without government restrictions.

Figure 7.4

The Canadian Market for T-shirts In Autarky



The Benefits of Trade—Imports

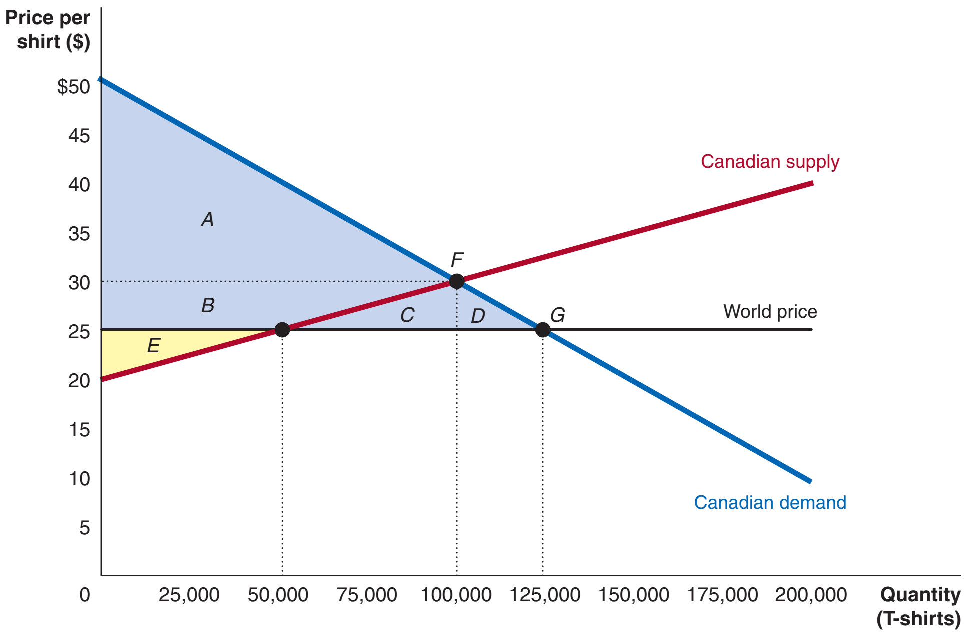
Figure 7.4 shows the Canadian market for T-shirts in autarky (no trade with other countries). You can see that the equilibrium price is $30 and the equilibrium quantity exchanged is 100,000. The blue-shaded area represents the consumer surplus, and the yellow-shaded area the producer surplus.

Assume that Canada starts to import T-shirts from Indonesia and other countries that produce T-shirts for $25.00 each. As Canada has a small population, we could buy all the T-shirts we wanted on the world market without having an impact on the world price. This also means that Canadian firms will not be able to sell their shirts for more than $25.00. The Canadian price will now be the same as the world price. At the world price of $25.00, Canadian manufacturers are only willing to sell 50,000 T-shirts but Canadians want to buy 125,000! In autarky this would mean a shortage of 75,000 T-shirts. Instead of a shortage, Canadians import the 75,000 T-shirts Canadian producers are unwilling to supply at the world price of $25.00.

Figure 7.5 shows the impact on the market, including the impact of imports on the consumer surplus and the producer surplus. In autarky the consumer surplus is the area

Figure 7.5

The Canadian Market for T-shirts After Trade



labelled A and the producer surplus is the sum of the areas labelled A and E. This means the total economic surplus from the T-shirt market in autarky is $A + B + E$.

After trade, the producer surplus is much smaller, simply area E. Consumer surplus is now much larger; it is the sum of areas A, B, C, and D. It isn't hard to see that the new total economic surplus is larger than it was in autarky. Canadians have gained an amount equal to the area of $C + D$.

We should note that not everyone gains from trade in this example. The Canadian producers of T-shirts and their employees have lost. The producer surplus is smaller than it used to be; in autarky, the producer surplus was area $E + B$, whereas now it is only area E. Canadian manufacturers are not only selling fewer T-shirts, but are selling them for less. This will likely lead to firms closing and some people losing their jobs.

It's important to notice that the areas C and D in this example were not benefits to anyone before international trade started. This is another illustration of how trade can create wealth.

The Gains from Trade—Exports

Canadians not only rely on imports for many consumer goods, but also export a great deal of what we produce. In this way, Canadians are very much dependent on international trade for employment. We've seen that consumers benefit from imports, but who benefits from exports? Canadian producers benefit from access to larger markets and increased demand for their products as a result of exports. These benefits aren't without a cost, however. As we'll see in this example, exports mean higher prices for Canadian consumers and thus a lower consumer surplus. Figure 7.6 shows the market for paper. Assume, to start, that Canadians are not allowed to buy paper from or sell paper to people in other countries (autarky). Without trading, the equilibrium market price is \$4.00 per package of paper and 6 million packages of paper are exchanged every day. Once again, the blue-shaded area is the consumer surplus and the yellow-shaded area is the producer surplus.

Assume that Canada begins to sell its paper to Japan, the European Union, and countries all over the world that pay \$6.00 per package for paper. As Canada is a small country, we can sell as much paper as we want on the world market without having an impact on the price. This also means that Canadian firms will be able to charge \$6.00 per package in the domestic market and Canadian consumers will have to pay \$6.00. At a price of \$6.00, Canadian consumers would buy only 4 million packages but Canadian

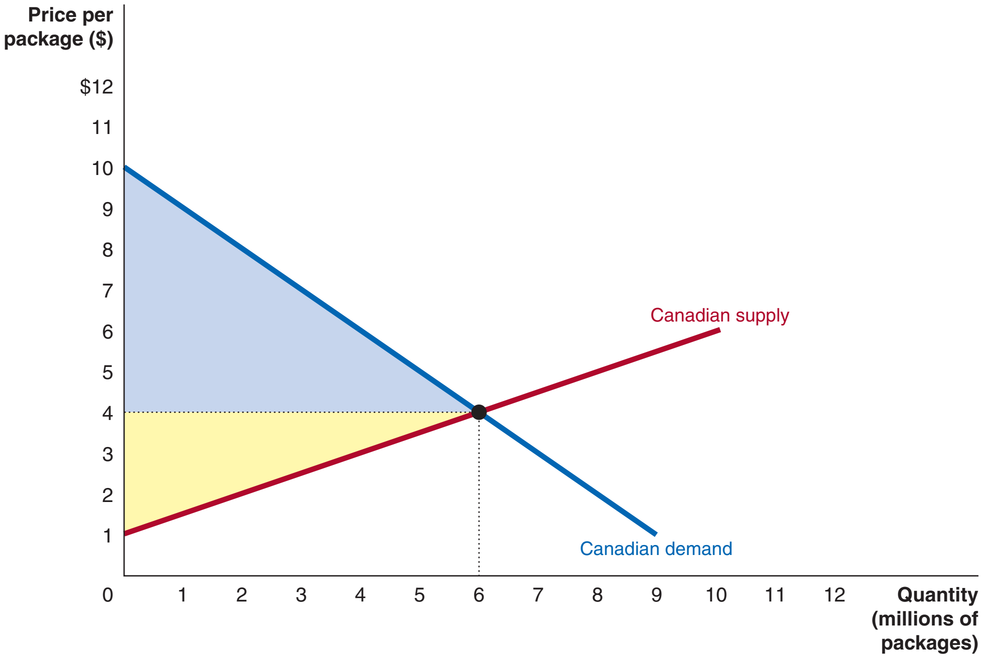
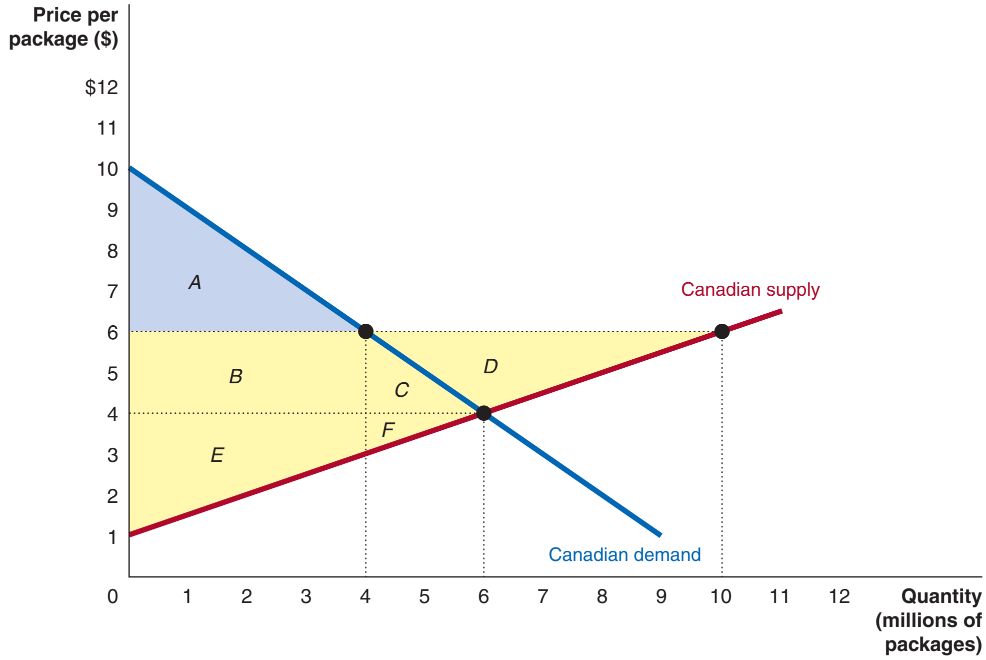


Figure 7.6

The Canadian Paper Market in Autarky

Figure 7.7

The Canadian Paper Market After Trade



producers would sell 10 million packages. In autarky, such a price would result in a surplus of 6 million packages of paper on the market. In this scenario, we export 6 million packages.

Figure 7.7 shows the impact of participating in international trade on the Canadian paper market. In autarky, the consumer surplus is the sum of the areas A, B, and C, while the producer surplus would be the sum of areas E and F. The total economic surplus of the paper market in Canada is the sum of all these areas, or $A + B + C + E + F$.

After trade, the consumer surplus is much smaller as Canadian consumers buy less paper and pay more for it. In this example, the consumer surplus shrinks by areas $B + C$. This loss in consumer surplus is actually compensated for by the increase in producer surplus. By selling paper internationally at the higher world price, Canadian firms are not only able to sell more paper, but get more for all the paper they sell. The result is an increase in producer surplus equal to $B + C + D$. Overall, Canadians are better off by an area equal to D.

Once again, this gain isn't completely free: Canadian consumers have a smaller consumer surplus than they did in autarky. This loss is more than made up for by the increase in producer surplus. Canadian paper firms can now expand their operations from producing 6 million packages to producing 10 million and that likely means hiring more workers and using more capital.

The fact that some people lose from international trade means that governments can sometimes be persuaded to prevent some international trade from taking place. In many cases, domestic firms that will face difficult foreign competition and their workers lobby the government to restrict international trade. These policies generally take one of two forms: (1) tariffs, or (2) quotas and voluntary export restraints.

Tariffs *Tariffs* are one of the most common forms of government restrictions on international trade. A tariff is simply a tax imposed by a government on goods imported into a country. Like any other tax, a tariff increases the cost of a good. Figure 7.8 shows the impact of a tariff of $2.50 per T-shirt on the Canadian T-shirt market. As a result of the tariff, the price of T-shirts rises to $27.50 and quantity consumed falls to 112,500, making consumer surplus shrink by an amount equal to the shaded areas $(A + B + C + D)$.

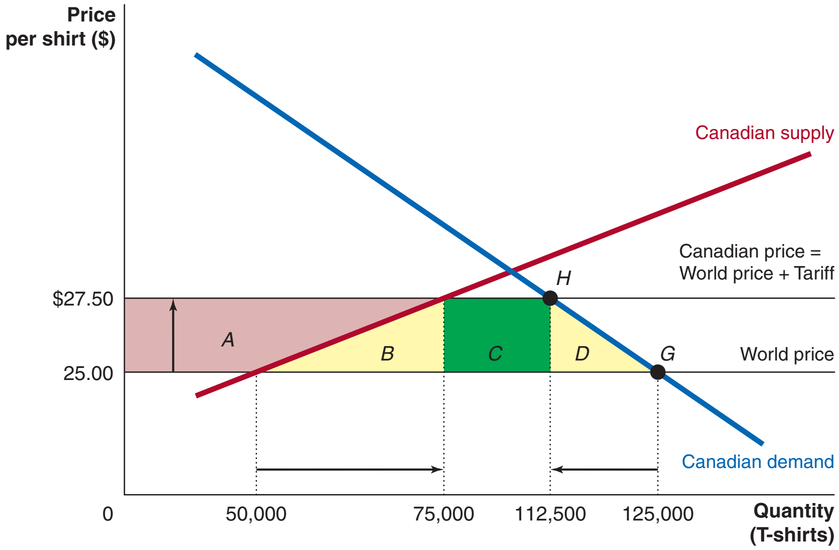


Figure 7.8

The Canadian T-shirt Market with a Tariff

Imposing the tariff allows Canadian T-shirt makers to increase their output from 50,000 to 75,000. Canadian producers also get more ($2.50 more) for each T-shirt they sell. The tariff increases the producer surplus by an amount equal to the red-shaded area (*A*).

After the tariff is imposed, however, Canadian consumers will be paying more for their T-shirts: $2.50 more. This means the consumer surplus will fall under a tariff. This increase in price for consumers causes them to buy fewer T-shirts in total, purchases fall from 125,000 to 112,500, and the consumer surplus falls by an amount equal to the sum of the yellow- and green-shaded areas ($B + C + D$).

The government will receive revenue from the tariff. By charging a tariff of $2.50 on each imported T-shirt, the government generates revenue of $93,750—you can find this amount as imports times the tariff or $(112{,}500 - 75{,}000) \times 2.5$. We've shown this as the green-shaded area (*C*).

When we consider all the changes, you should notice that areas *A* and *C* are gains to producers and government made at the expense of consumers. Essentially, the tariff transfers some of the benefit of a market from consumers to producers and government. The areas *B* and *D* aren't transferred, however; the benefits consumers used to get are lost to society. Area *B* is the loss to society due to supporting inefficient producers, and area *D* is loss due to the reduction in consumption.

A tariff will benefit Canadian T-shirt makers, but as you have seen, such benefits are not free. They come at the cost of a reduced consumer surplus and lower total economic surplus for Canadians. And we've only considered the costs and benefits to Canadians: A tariff will reduce the total economic surplus from the T-shirt market for our trading partners as well.

Quotas and Voluntary Export Restraints A **quota** is a numerical limit on the quantity of a good that can be imported, and has an effect similar to a tariff. A quota is generally imposed by the government of the importing country (though some countries do use quotas to restrict exports of agricultural products or natural resources). A **voluntary export restraint (VER)** is an agreement negotiated between two countries that places a numerical limit on the quantity of a good that can be imported by one country from the other country. In the early 1980s, the U.S. and Japan negotiated a VER that limited the number of Japanese cars imported by Americans. The Japanese government went along with the VER largely because it feared that the U.S. would impose a high tariff on all imports of Japanese cars if they did not cooperate. Quotas and VERs have similar economic effects.

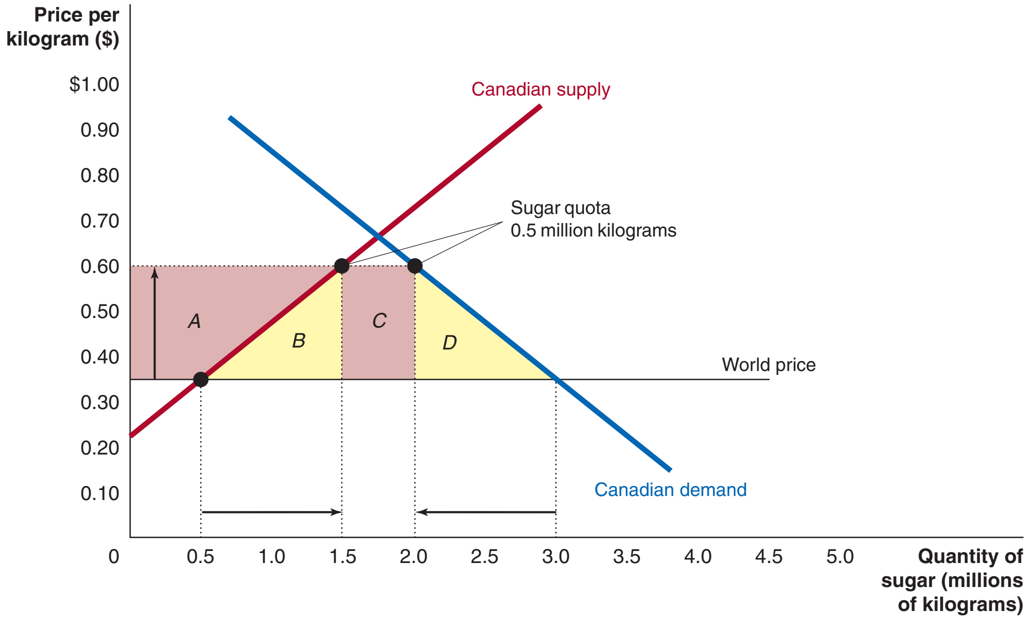
The main purpose of most tariffs and quotas is to reduce the foreign competition that domestic firms face. Historically, Canada has imposed tariffs on things like sugar, textiles, and some other finished goods, but not on the raw materials that go into

Quota A numerical limit a government imposes on the quantity of a good that can be imported into the country.

Voluntary export restraint (VER) An agreement negotiated between two countries that places a numerical limit on the quantity of a good that can be imported by one country from the other country.

Figure 7.9

The Canadian Sugar Market with a Quota



making these goods. These trade restrictions were generally intended to generate Canadian-based industries in processing the raw materials that go into making these goods. It is not uncommon to see old textile mills and sugar refineries throughout eastern Canada and parts of Ontario.

Measuring the Economic Effect of an Import Quota We can use the concepts of consumer surplus, producer surplus, and total economic surplus to measure the economic impact of a quota. We'll use the market for sugar as an example. Figure 7.9 shows the impact a quota would have on the Canadian market for sugar.

Without a sugar quota, Canadians would pay the world price of $0.35 per kilogram and purchase 3 million kilograms of sugar, importing 2.5 million kilograms. To find the price of sugar in the Canadian market after a quota of 0.5 million kilograms has been imposed, we need to look for a price at which the quantity demanded by Canadians is 0.5 million kilograms more than the quantity supplied by Canadian firms. The excess demand will be made up by imports. Thus, after the federal government imposes an import quota of 0.5 million kilograms, Canadians will have to pay $0.6 per kilogram for sugar, and they will buy only 2 million kilograms. The price increase that results from the import quota means consumer surplus will fall by the area $A + B + C + D$.

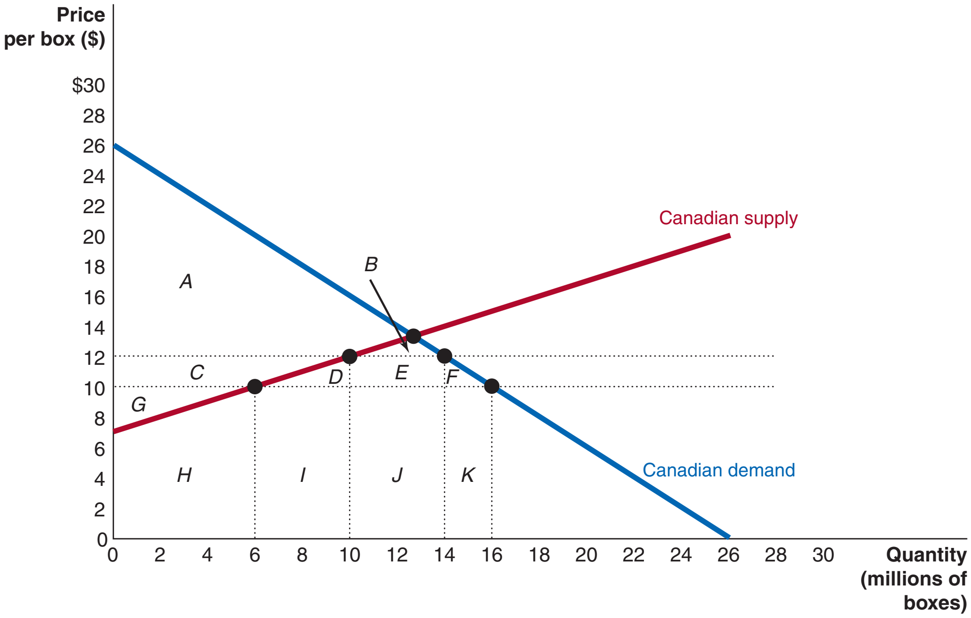
The area A of lost consumer surplus is captured by the producers that are now able to sell their output at the higher price. Area C is received by the *foreign* producers lucky enough to have gotten an import quota. They are now able to sell their products to Canadians at a price much greater than the world price. Areas B and D are losses to Canadian consumers that are not captured by anyone.

Solved Problem **7.4**

Measuring the Effect of a Quota

Suppose that Canada currently produces and imports apples. The Canadian government decides to restrict international trade in apples by imposing a quota that allows imports of only 4 million boxes of apples into Canada each year. The figure shows the results of imposing the quota.

Complete the following table, using the prices, quantities, and letters in the figure.



	Without Quota	With Quota
World price of apples		
Canadian price of apples		
Quantity supplied by Canadian growers		
Quantity demanded by Canadian consumers		
Quantity imported		
Area of consumer surplus		
Area of producer surplus		
Area of lost total economic surplus		

Solving the Problem

Step 1: Review the chapter material. This problem is about measuring the economic effects of a quota, so you may want to review the sections "Quotas and Voluntary Export Restraints," and "Measuring the Economic Effect of an Import Quota."

Step 2: Fill in the table. After studying Figure 7.9, you should be able to complete the table. Remember that consumer surplus is the area below the demand curve and above the market price.

	Without Quota	With Quota
World price of apples	$10 per box	$10 per box
Canadian price of apples	$10 per box	$12 per box
Quantity supplied by Canadian growers	6 million boxes	10 million boxes
Quantity demanded by Canadian consumers	16 million boxes	14 million boxes
Quantity imported	10 million boxes	4 million boxes
Area of consumer surplus	$A + B + C + D + E + F$	$A + B$
Area of producer surplus	G	$G + C$
Area of lost total economic surplus	None	$D + F$

Your Turn: Test your understanding by doing related problem 4.7 on page 216 at the end of this chapter. MyEconLab

The High Cost of Preserving Jobs with Tariffs and Quotas

Many countries still use tariffs and quotas to protect jobs, despite the costs associated with doing so. Economists have actually estimated the cost of using tariffs and quotas to protect jobs in the U.S. and Japan, and Table 7.4 shows some of these estimates.

Consider the cost of saving just one job growing rice in Japan for a single year: US$51,233,000. This extraordinary cost is based on the fact that Japanese consumers (who consider rice a key part of their diet) must pay a lot more every time they purchase rice.

Things aren't that much better when we start to consider the impact of American restrictions on international trade. For example, by restricting international trade in products such as softwood lumber, not only do the American consumers lose, as they have to pay US$1,044,271 for each job that is "saved," but Canadian producers lose out as that saved job is a lost Canadian job.

All of these estimated costs are based on the assumption that America's (and Japan's) trading partners do not respond to these trade restrictions by imposing restrictions on the products that the U.S. (Japan) exports. If the trading partners retaliate, the tariffs and quotas won't just hurt domestic consumers, but will also harm domestic producers. For a country like Canada, losing access to major international markets, like the U.S., would be devastating to our exporters.

Gains from Unilateral Elimination of Tariffs and Quotas

Some people argue that Canada can benefit from eliminated tariffs and quotas only if other countries eliminate their own restrictions on international trade in exchange. For politicians, it is easier to gain support for reducing or eliminating tariffs or quotas if it is done as part of an agreement with other countries that involves their eliminating some of their tariffs or quotas. This was part of the reason behind the North American Free Trade Agreement (NAFTA). But as we've seen throughout this chapter, *Canadians would gain from the elimination of tariffs and quotas even if other countries did not reduce their tariffs and quotas.*

Other Barriers to Trade

In addition to tariffs and quotas, governments can restrict international trade using a variety of other tools. For example, all governments require that imports meet certain health

Table 7.4

Costs of Protecting Jobs with Tariffs and Quotas in Japan and the U.S.

Product	Country	Number of Jobs Saved	Cost to Consumers per Saved Job (US$ per year)
Benzenoid chemicals	U.S.	216	1,376,435
Luggage	U.S.	226	1,285,078
Softwood lumber	U.S.	605	1,044,271
Dairy products	U.S.	2,378	685,323
Frozen orange juice	U.S.	609	635,103
Ball bearings	U.S.	146	603,368
Machine tools	U.S.	1,556	479,452
Women's handbags	U.S.	773	263,535
Canned tuna	U.S.	390	257,640
Rice	Japan		51,233,000
Natural gas	Japan		27,987,000
Gasoline	Japan		6,329,000
Paper	Japan		3,813,000
Beef, pork, and poultry	Japan		1,933,000
Cosmetics	Japan		1,778,000
Radio and TV sets	Japan		915,000

Sources: Federal Reserve Bank of Dallas, 2002 Annual Report; and Yoko Sazabami, Shujiro Urata, and Hiroki Kawai, *Measuring the Cost of Protection in Japan*, Washington, D.C.: Institute for International Economics, 1995.

and safety requirements. While health and safety standards are generally a good idea, governments can and sometimes do use these requirements to shield domestic producers from foreign competition. This is clearly what is happening when governments impose stricter health and safety requirements on imported products than on domestically produced ones.

Many governments also restrict imports of certain products for national security reasons. The argument is that in a time of war, a country should not be dependent on imports of critical war materials. Once again, these restrictions make sense but can be subject to abuse as the definition of critical wartime materials can be extended to include computers and software, cars, and even textiles.

The Arguments over Trade Policies and Globalization

7.5 LEARNING OBJECTIVE
Evaluate the arguments over trade policies and globalization.

The arguments over the regulation of trade in Canada and around the world date back to the time when Canada was still controlled by Britain. Even though Canada's trade barriers are much smaller than they have been in the past, there have been calls for the federal government to restrict international trade in the wake of the global recession triggered by the 2007 U.S. financial crisis.

To understand why restricting international trade in response to an economic downturn is a really bad idea, we can explore the attempt to protect domestic industries that took place during the 1930s. During what's come to be known as the Great Depression, the U.S. and many other countries thought they could reduce the impact of the depression on their economies by restricting international trade. To accomplish this, the U.S. government passed legislation known as the Smoot-Hawley Act of 1930, which increased the average U.S. tariff by more than 50 percent. Canada and virtually all of America's trading partners retaliated by increasing tariffs on America's exports by a similar amount. The result was a collapse of international trade. Many have argued that it was the Smoot-Hawley Act of 1930 that turned what would have been a deep recession into one of the worst economic disasters in modern history.

As World War II ended in 1945, Allied governments were looking for ways to reduce tariffs and revive international trade. To help achieve this goal, the General Agreement on Tariffs and Trade (GATT) was set up in 1948. Countries joining GATT agreed not to impose new tariffs or import quotas. In addition, a series of multilateral negotiations, called trade rounds, took place in which countries agreed to reduce tariffs from the very high levels seen in the 1930s.

As international trade has grown and evolved, trade between countries has expanded to include not only the goods covered under GATT but services as well. A new, broader agreement was reached in 1995 in which GATT was replaced by the **World Trade Organization (WTO)**, which currently has more than 150 member countries.

World Trade Organization (WTO) An international organization that oversees international trade agreements.

Why Do Some People Oppose the World Trade Organization?

In the years immediately after World War II, many low-income, or developing, countries erected high tariffs and restricted investment by foreigners. In the 1980s, when these policies failed to deliver the economic growth their proponents promised, many of the countries involved decided to become more open to foreign trade and investment, joining the WTO and following its policies. This process has become known as **globalization.**

Globalization The process of countries becoming more open to foreign trade and investment.

During the 1990s, however, opposition to globalization began to increase. In 1999, this opposition took the form of violent protests at a WTO meeting in Seattle. Though the protests began as a peaceful demonstration they turned into rioting and looting. Since 1999, meetings of the WTO and other organizations devoted to international cooperation have continued to see protests—some peaceful and others quite violent.

Why do some people find the idea of reducing barriers to international trade worthy of such violent opposition? There are a lot of different sources to the opposition to the WTO, but we'll explore three of the major ones. First, some opponents are specifically against the globalization process that began in the 1980s and became widespread in the 1990s. Second, other opponents have the same core motivation as those promoting trade barriers in 1930—to protect domestic producers from foreign competition. Third, some critics of the WTO support globalization in principle but believe the WTO favours the interests of high-income countries at the expense of lower-income countries. We'll explore some of these objections below.

Anti-Globalization Many of those who protest at WTO meetings distrust globalization. Some believe that free trade and foreign investment destroy the distinctive cultures of many countries. As developing countries began to open their economies to imports from other countries, particularly to cultural goods from the U.S., these imports began to replace the local equivalent products. So a teen in Thailand might be sitting in a McDonald's wearing Levi's jeans, while listening to American music on an iPod. Globalization has increased the variety of products available to consumers in developing countries, but some people argue that the resulting homogenization of global culture is too high a price to pay for increased variety.

Globalization has also allowed multinational corporations to relocate factories from high-income countries to low-income countries. These new factories in Indonesia, Mexico, and China pay lower wages than those paid to workers in countries like Canada. Further, the environmental regulations and working conditions are often much worse than they are in developed countries. Factories in some of these countries have even used child labour—which would be illegal in most developed countries. Some people have argued that firms with factories in developing countries should pay workers wages as high as those paid in high-income countries. They also believe these firms should abide by the health, safety, and environmental regulations that exist in the high-income countries.

The governments of most developing countries have resisted these proposals. They argue that when the currently rich countries were themselves poor, they also lacked environmental or safety standards and their workers were paid low wages. They argue that it is easier for rich countries to afford high wages, good environmental standards, and safety regulations than it is for poor countries. They also point out that many jobs that seem to have very low wages based on high income country standards are often much better than these workers were able to get before globalization.

Making the Connection

The Unintended Consequences of Banning Goods Made with Child Labour

Pallava Bagla/Corbis

Would eliminating child labour, such as stitching soccer balls, improve the quality of children's lives?

In many developing countries—such as Indonesia, Thailand, and Peru—children as young as 7 or 8 work for 10 or more hours a day. Reports of very young workers labouring long hours producing goods for export are troubling to people with a Canadian standard of living. In Canada, stores selling products made by young workers have been boycotted. Many of those promoting the boycotts assume that if child workers in developing countries weren't working in factories making clothes, toys, or other products, they would be in school just like Canadians the same age.

In fact, children in developing countries don't often have positive alternatives to working. Schooling is frequently available for only a few months each year, and even children who do attend school rarely do so for more than 10 years. Poor families are often unable to afford even the small costs associated with sending a child to school (such as the cost of school supplies over the years). Families sometimes rely on the earnings of children to survive, as poor families in Canada, Europe, and Japan once did. There is substantial evidence that as incomes begin to rise in poor countries, families rely less on child labour. Today, children under the age of 14 cannot be employed in most businesses (family-owned or family-run businesses and farms can be exceptions). In many countries where child labour is common, producing goods for export often pays better and is safer for children than the alternatives.

As preparations began for the 1998 World Cup in France, there were protests that Baden Sports—the main supplier of soccer balls—was purchasing balls from suppliers in Pakistan that used child workers. France decided to ban all use of soccer balls made by child workers. As a result, Baden Sports moved production from Pakistan, where the balls were hand-stitched by child workers, to China, where the balls were machine-stitched in a factory employing only adults. There was some criticism of the boycott at the time. In a broad study of child labour, three economists argued:

> Of the array of possible employment in which impoverished children might engage, soccer ball stitching is probably one of the most benign... [In Pakistan] children generally work alongside other family members in the home or in small workshops... Nor are the children exposed to toxic chemicals, hazardous tools or brutal working conditions. Rather, the only serious criticism concerns the length of the typical child stitcher's work-day and the impact on formal education.

In fact, the alternatives to soccer ball stitching for child workers in Pakistan turned out to be grim. According to economist Keith Maskus and the World Bank, a "large proportion" of the children who lost their jobs stitching soccer balls ended up begging or in prostitution.

Sources: Drusilla K. Brown, Alan V. Deardorff, and Robert M. Stern, "U.S. Trade and Other Policy Options to Deter Foreign Exploitation of Child Labor," in Magnus Blomstron and Linda S. Goldberg, eds., *Topics in Empirical International Economics: A Fetschrift in Honor of Bob Lipsey*, Chicago: University of Chicago Press, 2001; Tomas Larsson, *The Race to the Top: The Real Story of Globalization,* Washington, DC: Cato Institute, 2001, p. 48; and Eric V. Edmonds and Nina Pavcnik, "Child Labor in the Global Economy," *Journal of Economic Perspectives,* Vol. 19, No. 1, Winter 2005, pp. 199–220.

Your Turn: Test your understanding by doing related problem 5.1 on page 217 at the end of this chapter. MyEconLab

"Old Fashioned" Protectionism The anti-globalization argument against free trade and the WTO is relatively new. Another argument against free trade, called *protectionism*, has been around for centuries. **Protectionism** is the use of trade barriers to shield domestic producers from foreign competitors. For as long as international trade has been taking place, governments have attempted to restrict it to protect domestic firms. As we saw with the analysis of quotas, protectionism causes losses to consumers. In addition, by reducing the ability of countries to produce according to comparative advantage, protectionism reduces well-being in all countries that could be involved in trade.

Protectionism The use of trade barriers to shield domestic firms from foreign competition.

Given these costs, why do so many people promote protectionist policies? The use of protectionism is usually justified on the basis of one of the following arguments:

- **Saving jobs.** Supporters of protectionism argue that free trade reduces employment by driving domestic firms out of business. It is true that when more efficient foreign firms drive less efficient firms out of business, jobs are lost, but jobs are also created in expanding export industries. Every day, firms go out of business and new ones start up; in any healthy economy, jobs are continually being created and destroyed. Things can get difficult when the shrinking industries are very different from the ones that are expanding, but this problem is best addressed through education and training programs, not barriers to trade.
- **Protecting high wages.** Some people worry that firms in high-income countries will have to start paying much lower wages to compete with firms in developing countries. This fear is misplaced, however, because free trade actually raises living standards by increasing economic efficiency. When a country practises protectionism and produces goods and services it could get more cheaply from other

countries, it reduces its standard of living. For example, Canada could ban the import of bananas and grow them locally in greenhouses. Obviously this would entail very high opportunity costs, and bananas grown in this way would have to be sold at a very high price to cover these costs. Assume that the Government of Canada decided to ban the import of bananas: Eliminating the ban at some point in the future would eliminate the jobs of Canadian banana growers, but the standard of living in Canada would rise as banana prices fell and labour, machinery, and other resources moved out of banana growing and into producing goods and services for which Canada has a comparative advantage.

- **Protecting infant industries.** It is possible that firms in a country may have a comparative advantage in producing a good, but because the country began production of a good later than other countries, its firms initially have higher costs. In producing some goods and services, substantial "learning by doing" occurs. As workers and firms produce more of the good or service, they gain experience and become more productive. As a result of learning by doing, costs and prices fall. As the firms in the "infant industry" gain experience, their costs will fall, and they will be able to compete successfully with foreign producers. Under free trade, such companies would never get the chance to develop into competitive firms, as experienced foreign competitors could undercut the new firms' prices and drive them out of business before they gained enough experience to compete. To economists, this is one of the most persuasive of the protectionist arguments. There is a significant drawback to the infant industry argument—tariffs used to protect an infant industry eliminate the need for the firm to become internationally competitive. Eliminating tariffs protecting firms that do not become as efficient as their foreign competitors can be exceptionally difficult for politicians.
- **Protecting national security.** As we already discussed, a country should not rely on other countries for goods that are critical to its military defence. For example, the U.S. probably should not import fighter planes from China. The Canadian situation is slightly different from that of many other countries as Canada's national defence is highly integrated with and dependent on the U.S. and NATO. For countries that do use the national defence argument for raising barriers to trade, making a cogent case can be difficult. It is rare for an industry to ask for protection without raising the issue of national security in the U.S. even when its products are primarily civilian in nature.

Dumping Selling a product for a price below its cost of production.

Dumping In recent years countries have made use of a provision in the WTO agreement to impose tariffs on products that foreign firms are *dumping*. **Dumping** is selling a product for a price below its cost of production. Although allowable under the WTO, using tariffs to offset the effects of dumping is controversial.

In practice, determining whether foreign companies are dumping their products or are simply much more efficient producers is very difficult, because most firms are not eager to share their true costs of production with foreign governments. As a result, the WTO allows countries to determine that dumping has occurred if a product is exported for a lower price than it sells for on the home market. As usual, this approach has a weakness: Goods are likely to sell for different prices in different markets. For example, one would expect the price of Niagara Falls souvenirs to be higher in Niagara Falls than in China (where many of the souvenirs are made). This isn't dumping, just the reality of different markets. Some firms also offer "loss leaders"—products sold below cost—when introducing a new product or to attract consumers who will also buy other products at full price. These actions are part of normal business strategy for domestic and foreign producers alike, and therefore can't truly be considered dumping.

Positive versus Normative Analysis (Once Again)

Economists emphasize the burden on the economy imposed by tariffs, quotas, and other restrictions on international trade. Does it follow that these restrictions are bad? Recall from Chapter 1 the distinction between *positive analysis* and *normative analysis*.

Positive analysis concerns what is. Normative analysis is about what someone thinks *ought to be*. Measuring the cost to consumers of "saving" one job (as in Table 7.4) is an example of positive analysis. Asserting that all tariffs are bad and should be eliminated is normative analysis. Any tariff or quota makes some people better off and others worse off and we've shown that such restrictions on trade reduce total income and consumption. Whether increasing the profits and employment of firms in a protected industry justifies the costs to everyone in the country is a normative question.

Most economists tend not to support restrictions on international trade. There are, of course, exceptions. The use of trade restrictions to help end apartheid in South Africa is an often cited example. It may also be that eliminating trade restrictions too quickly would be too expensive in terms of adjustment costs, as workers losing jobs would have to search for work in an industry in which they don't have the needed skills.

The success of industries in getting the government to erect barriers to foreign competition depends partly on some members of the public knowing full well the costs of trade barriers but supporting them anyway. However, there are other factors at work:

1. The costs that tariffs and quotas impose on consumers tend to be small per person, despite being large in total. A cost of $35,000,000 on Canadian consumers is only about $1 per person. Most people don't worry too much about such small costs, even when they know the costs exist.
2. The jobs lost to foreign competition are easy to identify, but the jobs created by foreign trade can be harder to spot.

In other words, the industries that benefit from trade restrictions benefit a lot, while those that are harmed by trade restrictions lose only a little (though there are a lot more people who lose as a result of trade restrictions). This concentration of benefits and wide dispersal of burdens makes it easy to understand why governments receive strong pressure from some industries for protection and little pressure from the public to reduce tariffs.

Economics in Your Life

At the beginning of the chapter, we asked you to consider how some companies convince government to support trade restrictions. In the chapter, we saw that trade restriction tend to preserve relatively few jobs in protected industries, while costing consumers billions in higher prices. This might seem to increase the mystery of why governments pursue protectionist policies. We have also seen that, per person, the burden of a specific tariff, quota, or other trade restriction is generally small. Not many people will take the trouble of lobbying a politician for a benefit of only a few dollars a year. In many cases, it is this distribution of costs and benefits (with benefits concentrated to a few producers and the costs shared among millions of consumers) that causes Canadian and foreign politicians to erect trade barriers.

Conclusion

There are few issues economists agree upon more than the economic benefits of trade. However, there are few political issues as controversial as government policy toward international trade. Many people who would be reluctant to see government restrictions on domestic trade are quite willing to promote restrictions on international trade. However, the damage that high tariffs inflicted on the world population during the 1930s shows what can happen when governments around the world aggressively restrict international trade. Whether trade restrictions will become more or less common is subject to some doubt as pressure mounts on many governments to build barriers to international trade.

Read *An Inside Look* on the next page for a close look at the Canadian federal government's attempt to promote free trade in the wake of the global financial crisis of 2007.

AN INSIDE LOOK

Promoting Trade: Canada and the G20

AGENCE FRANCE-PRESSE

Canada Warns Against Protectionism

OTTAWA—Pockets of protectionism are hurting the global recovery, Canada's trade minister warned Tuesday, days before Canada hosts a G20 summit.

Most G20 countries have held firm on their commitments made at last year's summit in Pittsburgh not to impose new trade barriers, he said in an interview with AFP.

"Overall, we haven't had a wave of protectionism that was feared," he said. "But there have been some elements of backsliding," Peter Van Loan added, pointing to China, Russia and the United States.

In Toronto on June 26–27, G20 countries "will be called to account for what they've done, and (host Canada) will try to keep countries focused on the right path for the future," said the minister.

a Earlier, Van Loan told the American Chamber of Commerce in Canada in Toronto that a lasting economic recovery "depends on free trade."

"This is the message we will be delivering to our existing and future trade partners at the upcoming G20 meeting," he said in a speech.

Canadian Prime Minister Stephen Harper's administration, since coming to power in 2006, has signed free trade agreements with Colombia, Peru, Jordan, Panama and the European Free Trade Association: Iceland, Liechtenstein, Norway and Switzerland.

b In February, the United States and Canada ended a year-old dispute as Washington agreed to waive "Buy American" provisions barring Canadian firms from projects under a massive stimulus package.

The controversial US provisions were part of the nearly 800-billion-dollar US stimulus package adopted last year and drew criticism from various countries which branded them as a protectionist measure.

Under the deal reached between the United States and Canada, Washington would provide Canadian suppliers access to state and local public works projects under the American Recovery and Reinvestment Act of 2009 aimed at stimulating the world's largest economy out of recession.

In return, Ottawa would also provide US suppliers with access to construction contracts across its provinces and territories, as well as in a number of municipalities—seen as a breakthrough by Washington.

c But new measures in other countries have cost Canadian companies billions of dollars in exports, Van Loan lamented.

Russia imposed merchandise tariffs on agricultural machinery, for example, "in response to the crisis." "We've had issues with canola access in China that cost us 1.2 billion dollars in exports to China."

"Historically, protection has caused economic slowdowns and freer trade has lead [sic] to economic growth, so that's the most important reason in the global economic context for resisting protectionism," Van Loan said.

"For Canada, which is two-thirds trade dependent, our economic recovery depends on being able to trade freely and to seek further trading opportunities."

Source: Michel Comte, "Canada Warns Against Protectionism," Agence France-Presse, June 22, 2010, accessed at http://www.google.com/hostednews/afp/article/ALeqM5iHZZ-T1sFigbijwjkWBfiXCE57PA

Key Points in the Article

This article discusses the Canadian government's efforts at the G20 meetings to prevent countries from erecting barriers to international trade. In general these efforts have been successful as the wave of tariffs, quotas, and other trade restrictions that some people feared has not arisen. While some countries have enacted policies to restrict international trade, there has not been much retaliation from their trading partners. The policy that was of primary concern to Canadian businesses was the so called "Buy American" provisions of the U.S. stimulus package. This policy required that the U.S. infrastructure projects (roads, bridges, etc.) hire only American firms. Such a policy would represent a major barrier to trade between Canada and the U.S.

Analyzing the News

a The economies of the developed world are highly integrated. Many firms with their headquarters in Canada or the U.S. or Germany sell their products not just in their home country but all over the world. This interconnectedness was increasing before the financial crisis. For example, the American firm Caterpillar makes heavy equipment (bulldozers, excavators, etc.) and sells its products in countries all around the globe. For the economies of the U.S. and Canada to recover, they cannot be cut off from their consumers in other countries. If suddenly Caterpillar could not sell machinery outside the U.S., or Bombardier couldn't sell outside Canada, these companies would have to lay off hundreds, if not thousands of workers, making the recession even worse.

b The "Buy American" provision of the U.S. stimulus package was designed to ensure that the government spending on new roads, bridges, and buildings went only to American firms. Such a policy would have meant that Canadian firms normally able to export their services and knowledge to the U.S. could no longer do so. The result would be less employment and profit at those firms. These firms would be likely to lobby the Canadian government for similar rules that denied American firms access to the Canadian stimulus spending taking place at the same time. Instead of preventing firms on both sides of the U.S.–Canada border from applying their expertise to infrastructure projects, the governments agreed to allow firms from the other country to work on domestic projects.

c Even though the U.S. and Canada managed to come to an agreement to avoid raising trade barriers, not all countries have maintained free trade. Russia and China have both taken steps to restrict trade with Canada. The Chinese restriction on the canola trade is estimated to have cost Canadian producers $1.2 billion. The reduction of trade barriers tends to be tied to periods of increasing economic wealth, as more efficient firms replace less efficient ones. International trade is a key reason that Canada is one of the wealthiest nations in the world. If international trade were suddenly to stop, a great many Canadians would become unemployed at the same time as they had to pay a lot more for the things they use every day.

Thinking Critically

1. "Buy Local" provisions, as well as tariffs and quotas on imports, are intended to save jobs. Do they in fact save jobs? Would you support a tariff on imported passenger planes to protect Bombardier? Why or why not?
2. Give examples of goods you think Canadian firms have a comparative advantage in producing. In producing what goods do you think other countries have a comparative advantage (relative to Canada)? (Give examples.)

Chapter Summary and Problems

Key Terms

Absolute advantage, p. 193	**Exports, p. 190**	**Imports, p. 190**	**Terms of trade, p. 194**
Autarky, p. 194	**External economies, p. 199**	**Opportunity cost, p. 192**	**Voluntary export restraint (VER), p. 203**
Comparative advantage, p. 192	**Free trade, p. 199**	**Protectionism, p. 209**	**World Trade Organization (WTO), p. 207**
Dumping, p. 210	**Globalization, p. 207**	**Quota, p. 203**	
		Tariff, p. 190	

Summary

*LO 7.1 International trade has been increasing in recent decades, in part because of reductions in tariffs and other barriers to trade. A **tariff** is a tax imposed by a government on imports. The quantity of goods and services that Canada imports and exports has been continually increasing. **Imports** are goods and services bought domestically but produced in other countries. **Exports** are goods and services produced domestically and sold to other countries. Currently, we export about 40 percent of everything we produce, and exports from Canada account for 2.6 percent of global trade around the world.

LO 7.2 **Comparative advantage** is the ability of an individual, a business, or a country to produce a good or service at the lowest opportunity cost. **Opportunity cost** is the highest-valued alternative that must be given up to engage in an activity. **Absolute advantage** is the ability to produce more of a good or service than competitors when using the same amount of resources. Countries trade on the basis of comparative advantage, not on the basis of absolute advantage.

LO 7.3 **Autarky** is a situation in which a country does not trade with other countries. The **terms of trade** is the ratio at which a country can trade its exports for imports from other countries. When a country specializes in producing goods where it has a comparative advantage and trades for the other goods it needs, the country will have a higher level of income and consumption. We do not see complete specialization in production for three reasons: (1) Not all goods and services are traded internationally; (2) production of most goods involves increasing opportunity costs; and (3) tastes for products differ. Although the population of a country as a whole benefits from trade, companies—and their workers—that are unable to compete with lower-cost foreign producers lose. Among the main sources of comparative advantage are climate and natural resources, relative abundance of labour and capital, technology, and external economies. **External economies** are reductions in a firm's costs that result from an increase in the size of an industry. A country may develop a comparative advantage in the production of a good, and then as time passes and circumstances change, the country may lose its comparative advantage in producing that good and develop a comparative advantage in producing other goods.

LO 7.4 **Free trade** is trade between countries without government restrictions. Government policies that interfere with trade usually take the form of tariffs, quotas, or voluntary export restraints (VERs). A tariff is a tax imposed by a government on imports. A **quota** is a numeric limit imposed by a government on the quantity of a good that can be imported into the country. A **voluntary export restraint (VER)** is an agreement negotiated between two countries that places a numerical limit on the quantity of a good that can be imported by one country from the other country. Saving jobs by using tariffs and quotas is often very expensive.

LO 7.5 The **World Trade Organization (WTO)** is an international organization that enforces international trade agreements. The WTO has promoted **globalization**, the process of countries becoming more open to foreign trade and investment. Some critics of the WTO argue that globalization has damaged local cultures around the world. Other critics oppose the WTO because they believe in **protectionism**, which is the use of trade barriers to shield domestic firms from foreign competition. The WTO allows countries to use tariffs in cases of **dumping**, when an imported product is sold for a price below its cost of production. Economists can point out the burden imposed on the economy by tariffs, quotas, and other government interferences with free trade. But whether these policies should be used is a normative decision.

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Review Questions

LO 7.1

1.1 Briefly explain whether the value of Canadian exports is typically larger or smaller than the value of Canadian imports.

1.2 Briefly explain whether you agree with the following statement: "International trade is more important to the Canadian economy than to most other economies."

LO 7.2

2.1 What is the difference between absolute advantage and comparative advantage? Will a country always be an exporter of a good for which it has an absolute advantage in production? Briefly explain.

2.1 A WTO publication calls comparative advantage "arguably the single most powerful insight in economics." What is comparative advantage? What makes it such a powerful insight?

*'Learning Objective' is abbreviated to 'LO' in the end of chapter material.

Based on World Trade Organization, "Understanding the WTO," www.wto.org/english/thewto_e/whatis_e/tif_e/fact3_e.htm.

LO 7.3

3.1 What is meant by a country "specializing in the production of a good"? Is it typical for countries to be completely specialized? Briefly explain.

3.2 Does everyone gain from international trade? If not, explain which groups lose.

LO 7.4

4.1 What is a tariff? What is a quota? Give an example, other than a quota, of a non-tariff barrier to trade.

4.2 Who gains and who loses when a country imposes a tariff or a quota on imports of a good?

LO 7.5

5.1 What is globalization? Why are some people opposed to globalization?

5.2 What is protectionism? Who benefits and who loses from protectionist policies? What are the main arguments people use to justify protectionism?

Problems and Applications

LO 7.1

1.1 If Canada were to stop trading goods and services with other countries, which Canadian industries would be likely to see their sales decline the most? Briefly explain.

1.2 Why might a smaller country, such as the Netherlands, be more likely to import and export larger fractions of its GDP than would a larger country, such as China or the United States?

LO 7.2

2.1 Why do the goods that countries import and export change over time? Use the concept of comparative advantage in your answer.

2.2 Briefly explain whether you agree with the following argument: "Unfortunately, Bolivia does not have a comparative advantage with respect to Canada in the production of any good or service." (Hint: You do not need any specific information about the economies of Bolivia and Canada to be able to answer this question.)

2.3 The following table shows for Greece and Italy the hourly output per worker measured as quarts of olive oil and pounds of pasta.

	Output per Hour of Work	
	Olive Oil	Pasta
Greece	4	2
Italy	4	8

Calculate the opportunity cost of producing olive oil and pasta in both Greece and in Italy.

2.4 Some of those arguing against the Canadian government's efforts to increase trade ties with other regions and countries state that removing trade barriers will mean losing jobs in Canada. What do you think people mean by "losing jobs in Canada"? Using the economic concept of comparative advantage, explain under what circumstances it would make sense for Canada to produce all of a specific good—say, T-shirts—in Canada. Do you agree with the lost jobs objection to free trade? Explain.

LO 7.3

3.1 **[Related to the Making the Connection on page 195]** Like Magna International, many American firms depend on being able to export their products to the world market. When the U.S. was debating restricting participation in new government infrastructure development program to U.S. firms in 2008–09, both General Electric and Caterpillar opposed the "Buy American" provision. Douglas Irwin wrote in the *New York Times*:

> General Electric and Caterpillar have opposed the Buy American provision because they fear it will hurt their ability to win contracts abroad.... Once we get through the current economic mess, China, India and other countries are likely to continue their large investments in building projects. If such countries also adopt our preferences for domestic producers, then America will be at a competitive disadvantage in bidding for those contracts.

What are "preferences for domestic producers"? Why would these preferences put U.S. firms at a "competitive disadvantage"? Why might "having difficulty making sales in China and India" be a particular problem for Caterpillar?

"If We Buy American, No One Else Will," by Douglas A. Irwin from *New York Times*, January 31, 2009. Copyright © 2009 by Douglas A. Irwin.

3.2 **[Related to Solved Problem 7.3 on page 196]** The following table shows the hourly output per worker in two industries in Chile and Argentina.

	Output per Hour of Work	
	Hats	Beer
Chile	8	6
Argentina	1	2

a. Explain which country has an absolute advantage in the production of hats and which country has an absolute advantage in the production of beer.

b. Explain which country has a comparative advantage in the production of hats and which country has a comparative advantage in the production of beer.

c. Suppose that Chile and Argentina currently do not trade with each other. Each has 1,000 hours of labour to use producing hats and beer, and the countries are currently producing the amounts of each good shown in the following table.

	Output per Hour of Work	
	Hats	Beer
Chile	7,200	600
Argentina	600	800

Using this information, give a numerical example of how Chile and Argentina can both gain from trade. Assume that after trading begins, one hat can be exchanged for one barrel of beer.

3.3 [**Related to** Solved Problem 7.3 **on page 196**] A political commentator makes the following statement:

> The idea that international trade should be based on the comparative advantage of each country is fine for rich countries like Canada and Japan. Rich countries have educated workers and large quantities of machinery and equipment. These advantages allow them to produce every product more efficiently than poor countries can. Poor countries like Kenya and Bolivia have nothing to gain from international trade based on comparative advantage.

Do you agree with this argument? Briefly explain.

3.4 Briefly explain whether you agree with the following statement: "Most countries exhaust their comparative advantage in producing a good or service before they reach complete specialization."

3.5 Is free trade likely to benefit a large, populous country more than a small country with fewer people? Briefly explain.

3.6 Economist Hal Varian has made two observations about international trade:

a. Trade allows a country "to produce more with less."

b. There is little doubt who wins [from trade] in the long run: consumers.

Briefly explain whether you agree with either or both of these observations.

Based on Hal R. Varian, "The Mixed Bag of Productivity," *New York Times*, October 23, 2003, accessed September 6, 2013, at http://www.nytimes.com/2003/10/23/business/23SCEN.html.

3.7 [**Related to** Don't Let This Happen to You **on page 198**] In 2012, the Canadian government was pursuing trade deals with the European Union, India, China, and many other countries. Governments generally promote such trade deals as "win–win" with both countries involved. Is everyone in both countries likely to win from the agreement? Briefly explain.

LO 7.4

4.1 In a recent public opinion poll, 61 percent of people responding supported increasing trade with Asia. At the same time, 59 percent of those polled don't support the idea of a free trade agreement with China. What is "free trade"? Do you believe it helps or hurts an economy? (Be sure you define what you mean by "helps" or "hurts".) Why do you think Canadians might support the idea of more trade with Asia but oppose a free trade agreement (like the one Canada already has with the U.S. and Mexico) with China?

Based on Mark Kennedy, "Canadians want Stephen Harper to block foreign investment: poll." PostMedia News, December 18, 2012. http://www.canada.com/Canadians+want+Stephen+Harper+block+foreign+investment+poll/7716805/story.html

4.2 The G20 is a group of central bankers and finance ministers from 19 countries and the European Union who have a common goal of promoting global economic stability. In a letter to the editor of the *New York Times*, Victor K. Fung, the chairman of the International Chamber of Commerce, commented on the 2009 G20 summit in London:

> While global leaders promise to fight protectionism when they gather at summit meetings, they must also resist intense pressure back home to adopt populist policies that will most certainly protract the recession.

What does Fung mean by "fighting protectionism"? What does he mean by "populist policies"? How might populist trade policies extend a period of high unemployment and low production, such as the 2007–09 recession?

Based on Victor K. Fung, "Resist Protectionism," Letter to the Editor, *New York Times*, March 30, 2009.

4.3 Canada produces beef and also imports beef from other countries.

a. Draw a graph showing the demand and supply of beef in Canada. Assume that Canada can import as much as it wants at the world price of beef without causing the world price of beef to increase. Be sure to indicate on the graph the quantity of beef imported.

b. Now show on your graph the effect of Canada imposing a tariff on beef. Be sure to indicate on your graph the quantity of beef sold by Canadian producers before and after the tariff is imposed, the quantity of beef imported before and after the tariff, and the price of beef in Canada before and after the tariff.

c. Discuss who benefits and who loses when Canada imposes a tariff on beef.

4.4 [**Related to the** Chapter Opener **on page 189**] Which U.S. firms are most likely to be unfavourably affected by a provision that only U.S. firms can participate in programs financed by federal spending?

4.5 A student makes the following argument:

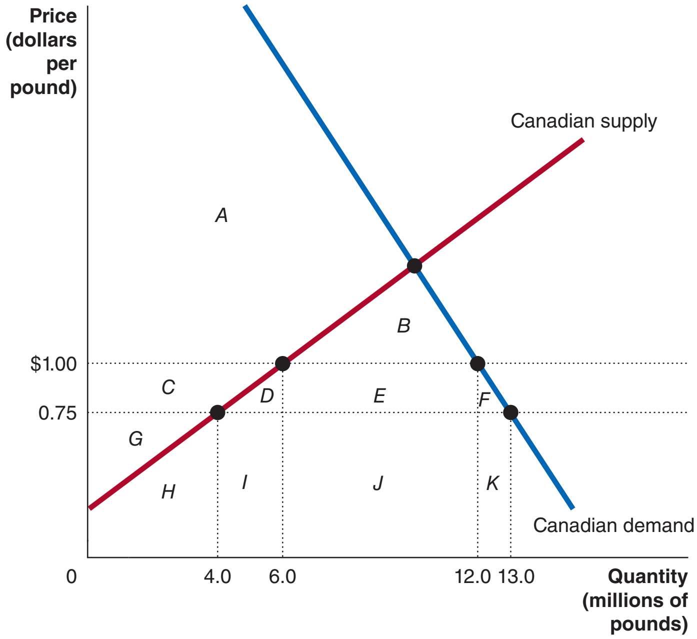
> Tariffs on imports of foreign goods into Canada will cause the foreign companies to add the amount of the tariff to the prices they charge in Canada for those goods. Instead of putting a tariff on imported goods, we should ban importing them. Banning imported goods is better than putting tariffs on them because Canadian producers benefit from the reduced competition, and Canadian consumers don't have to pay the higher prices caused by tariffs.

Briefly explain whether you agree with the student's reasoning.

4.6 Suppose China decides to pay large subsidies to any Chinese company that exports goods or services to Canada. As a result, these companies are able to sell products in Canada at far below their cost of production. In addition, China decides to bar all imports from Canada. The dollars that Canada pays to import Chinese goods are left in banks in China. Will this strategy raise or lower the standard of living in China? Will it raise or lower the standard of living in Canada? Briefly explain. Be sure to provide a definition of "standard of living" in your answer.

4.7 [**Related to** Solved Problem 7.4 **on page 204**] Suppose that Canada currently both produces kumquats and imports them. The Canadian government then decides to restrict international trade in kumquats by imposing a quota that allows imports of only 6 million pounds of kumquats into Canada each year. The figure shows the results of imposing the quota.

Fill in the table using the letters in the figure.



	Without Quota	With Quota
World price of kumquats	________	________
Canadian price of kumquats	________	________
Quantity supplied by Canadian firms	________	________
Quantity demanded	________	________
Quantity imported	________	________
Area of consumer surplus	________	________
Area of domestic producer surplus	________	________
Area of deadweight loss	________	________

LO 7.5

5.1 **[Related to the Making the Connection on page 208]** The following excerpt is from a newspaper story on former U.S. President Bill Clinton's proposal to create a group within the World Trade Organization (WTO) responsible for developing labour standards. The story was published just before the 1999 WTO meeting in Seattle that ended in rioting:

> [President Clinton proposed that] core labor standards … become "part of every trade agreement. And ultimately I would favor a system in which sanctions would come for violating any provision of a trade agreement." … But the new U.S. stand is sure to meet massive resistance from developing countries, which make up more than 100 of the 135 countries in the WTO. They are not interested in adopting tough U.S. labor standards ….

What did Clinton mean by "core labor standards"? Why would developing countries resist adopting these standards?

From Terence Hunt, "Salute to Trade's Benefits Turns into 'Kind of Circus,'" Associated Press, December 2, 1999, accessed September 6, 2013, at http://www.southcoasttoday.com/apps/pbcs.dll/article?AID=/19991202/NEWS/312029966&cid=sitesearch.

5.2 Suppose you are explaining the benefits of free trade and someone states, "I don't understand all the principles of comparative advantage and gains from trade. I just know that if I buy something produced in Canada, I create a job for a Canadian, and if I buy something produced in Brazil, I create a job for a Brazilian." Do you agree with this statement? When Canada imports products in which it does not have a comparative advantage, does that mean that there are fewer jobs in Canada? In the example in the text with South Korea and Canada producing and trading cell phones and televisions, when Canada imports televisions from South Korea, does the number of jobs in Canada decline?

5.3 Often federal opposition parties resist free trade agreements with other countries. One of the reasons these political parties cite for resisting free trade agreements is that "free trade hurts Canadian workers." Is it likely that trade agreements that reduce tariffs and quotas will harm Canadian workers? Briefly explain.

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