WHY WE TRADE

Chinese Factory Workers Preparing Goods for Export

Unit Overview

Very few days pass in the United States without media headlines concerning international trade. Should the United States impose sanctions that limit trade with certain countries? Do the trade policies of other nations give them an unfair advantage? How should Americans respond to concerns about the trade deficit? All of these issues sometimes make people wonder if trade is really worth the hassle. Economists, however, maintain that international trade improves the global standard of living and encourages healthy economic competition. They use the basic principles of economics to explain why this is true. Let's see how it all works.

Why Do We Trade?

Why do we trade? For the most part, nations trade for the same reasons people do. They believe that the goods and services received are more valuable than those which they are giving up. If you ask an economist this question, he or she would likely answer that trade happens because resources are scarce and unequally distributed around the globe. Within their borders, countries vary dramatically in the amount of land available for farming, mineral deposits, oil reserves, timber and other things too numerous to list. Climate and geographic features, such as mountains, waterways and desserts, also limit a nation's ability to produce all the goods and services that citizens want and need. The table below compares four countries in eight categories. Each nation possesses different natural, human and physical resources. Trade is one way for a nation to make up for what it lacks.

Sample of the Distribution of Resources				
	India	**France**	**Liberia**	**United States**
Total area in square kilometers	3.3 million	643, 800	111,369	9.8 million
Resources	Coal, iron ore, manganese, mica, bauxite, titanium, natural gas, petroleum, diamonds, limestone	Coal, iron ore, bauxite, titanium, antimony, arsenic, potash, timber, fish, gypsum, feldspar	Iron ore, timber, diamonds, gold, hydropower	Coal, copper, lead, phosphates, molybdenum, uranium, bauxite, gold, iron, mercury, nickel, potash, silver, tungsten, zinc, petroleum, natural gas, timber
Percentage of agricultural land	60.5%	52.7%	28%	44.5%
Population	1.3 billion	67 million	4.3 million	324 million
Labor force	513.7 million	30.5 million	1.654 million	158.6 million
Cell phones per 100 people	81/100	100/100	87/100	119/100
Airports	346	464	29	13,513
Literacy rate	74%	99%	54.5%	86%

At the same time, there are major differences in the available **physical capital**, or human-made materials, needed to create certain goods. Infrastructure, including roads and bridges, airports, factories, power plants, tools and machinery, fall into this category and are not readily accessible in some regions of the world. Industry also requires **human capital**, or skilled workers. To measure a country's human capital, economists often refer to the **literacy rate**. This is the percentage of people over the age of fifteen who can read and write. A high literacy rate likely represents an educated and capable work force. History and culture, too, play a role in a country's allocation of resources. For example, long periods of civil warfare or frequent invasions tend to reduce a nation's capacity to produce goods and services.

We also trade simply because it gives us more of what we want. When today's shopper visits a mall, he or she is likely to come home with clothes from China, shoes from Indonesia and a bicycle helmet made in France. This extensive variety of products is the result of international trade. It gives consumers more choices, lowers costs and improves quality by encouraging competition. At the same time, statistics seem to indicate that countries engaged in international trade develop a higher standard of living. Trade also creates a global economic interdependence that builds relationships and promotes peace. However, like all decisions, the choices surrounding international trade come with opportunity costs.

Go to Questions 1 through 6.

Absolute and Comparative Advantage

How do nations decide what to produce, how to produce and for whom to produce goods and services when it comes to trade? Because countries differ in resources, capital, climate and geography, they sometimes concentrate on certain items rather than producing everything themselves. This is referred to as **specialization**. For example, Guatemala has very limited mineral resources, but it does have the right soil and climate to produce large quantities of bananas. By exporting bananas, it earns the money to purchase products that it cannot manufacture efficiently. Does this example mean that a country with ample resources has no reason to trade? If a nation has access to the latest technology and has educated a well-trained workforce, can it ignore global trade and become self-sufficient? In reality, countries with more-than-adequate resources as well as limited ones can benefit from trade. Two economic concepts, absolute advantage and comparative advantage, explain why this is possible.

When one country produces more of a particular product than other nations who manufacture less with the same amount of resources, it is said to have an **absolute advantage** over its competitors. Let's see how it works with the imaginary countries of Mocha and Macadamia. Both countries are almost equal in size, population and available capital. Each one only grows two crops—coffee beans and macadamia nuts. If both countries dedicate all their resources to growing coffee beans, Mocha can produce 40,000,000 pounds of coffee annually, while Macadamia can only produce 6,000,000 pounds of the same good in the same time period. Clearly, Mocha has the absolute advantage. What happens if both countries shift to growing only macadamia nuts? Mocha produces 8,000,000 pounds of nuts, but Macadamia produces 6,000,000 pounds. Once again, Mocha has the absolute advantage.

Absolute Advantage: Who Has It?		
Mocha	**Macadamia**	**And the Winner Is?**
Coffee only—40,000,000 pounds annually	Coffee only—6 million pounds annually	Mocha
Macadamia nuts only-- 8 million pounds annually	Macadamia nuts only—6 million pounds annually	Mocha

At first, economists believed that absolute advantage was the basis for trade because it permitted a country to manufacture enough of a particular good to satisfy its population and to sell the remainder in the world market. However, it soon became obvious that trade benefitted countries with abundant resources as well as those with few resources. In the early nineteenth century, **David Ricardo**, a British economist, argued that the key to trade is not which country produces the most of one product with the fewest resources but the country that produces the most at the lowest **opportunity cost**. This concept is referred to as **comparative advantage.** Remember—opportunity cost is what you give up when you choose to do one thing rather than another.

Let's take a second look at Mocha and Macadamia using comparative advantage. If Mocha shifts its production to macadamia nuts only, it gives up 40,000,000 pounds of coffee. This is an opportunity cost of five pounds of coffee for every one pound of macadamia nuts produced. For Macadamia, the opportunity cost that results from growing just macadamia nuts is much lower. Because it is giving up 6,000,000 pounds of coffee beans to produce 6,000,000 pounds of macadamia nuts, the opportunity cost for 1 pound of nuts is 1 pound of coffee. Since the same pound of macadamia nuts costs Mocha five pounds of coffee, Macadamia has the comparative advantage for this product.

Macadamia Nuts and/or Coffee Beans?

Who has the comparative advantage when both countries shift to producing just coffee? For every one pound of coffee that it produces, Mocha gives up 1/5 pound of macadamia nuts. If Macadamia produces only coffee, its opportunity cost is one pound of macadamia nuts. When it comes to coffee, Mocha has the lower opportunity cost and, therefore, the comparative advantage. The citizens of Mocha actually make more money by producing coffee and, in turn, by trading for macadamia nuts. This is a good illustration of the law of comparative advantage, which says that a nation is better off when it produces goods and services that result in a comparative advantage. It can then use the money to buy other goods that it cannot produce as efficiently.

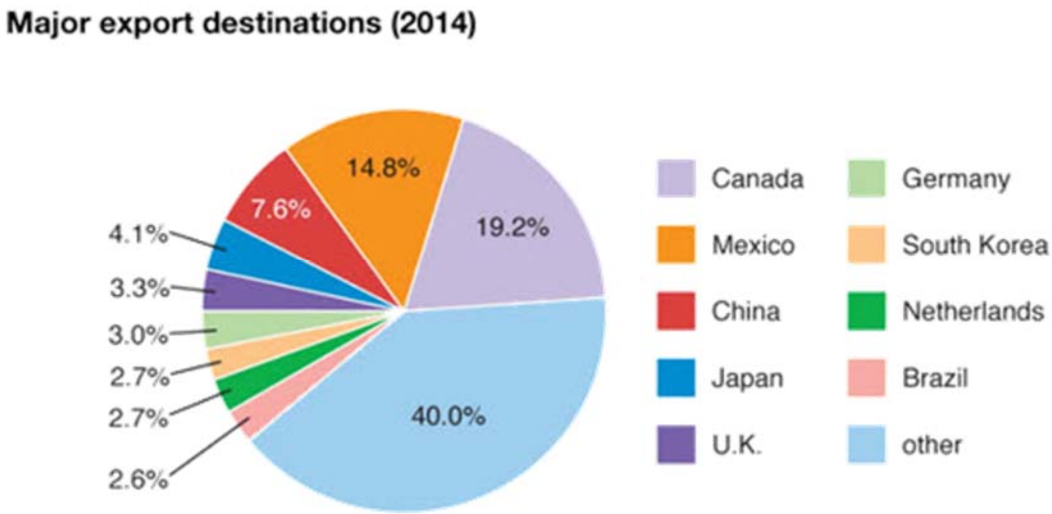
Comparative Advantage: Who Has It?		
Mocha	**Macadamia**	**And the Winner Is?**
Macadamia nuts only—Opportunity cost of 5 pounds of coffee per 1 pound of nuts	Macadamia nuts only—opportunity cost of 1 pound of coffee per 1 pound of nuts	Macadamia
Coffee only—opportunity cost of 1/5 pound of nuts per one pound of coffee	Coffee only—opportunity cost of 1 pound of nuts per one pound of coffee	Mocha

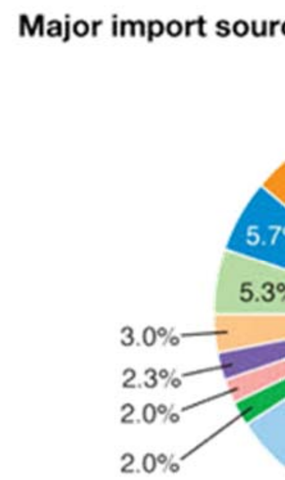
Here is an example of how two real countries use comparative advantage so that each one benefits. The United States has the resources, physical capital and skilled labor force to manufacture farm equipment at a comparative advantage. Columbia, however, does not. It does have the climate, capital and skilled labor required to produce coffee beans. Because Columbia has the comparative advantage in the production of coffee beans, it concentrates of that particular good and exports coffee to the United States. Through this transaction, Columbia earns the money to purchase farm equipment from the United States. The United States benefits by selling the farm machinery and by having access to a supply of coffee. This makes the two countries **trading partners**. Trading partners often negotiate agreements so that each country gets the most for its money.

Go to Questions 7 through 14.

Trade Surpluses and Deficits

In terms of world trade, the United States is a major exporter and a major importer. An **export** is a good that is sent to another country for sale. The United States has a wide range of exports, including medical equipment, vehicles, agricultural products, plastics, spacecraft and computer software. Although goods make up most of the items sold in the global market, services, such as educational programs, data processing, financial services and medical care, have grown in recent decades. **Imports**, on the other hand, are goods brought in by other countries for sale. America's top imports include oil, furniture, machinery, pharmaceuticals, vehicles and precious metals. Note that there are some things that the U.S. imports and exports. The countries with whom the United States exchanges the most goods and services are listed in the charts below.





Nations traditionally have preferred to maintain a balance of trade so that the value of their imports roughly equals the value of their exports. This keeps their currency stable in the international market. When a country's exports are greater than its imports, it experiences a **trade surplus**. Currently, China, Russia and Japan run large surpluses of trade. When a country imports more than it exports, a **trade deficit** occurs. Spain, the United Kingdom, Australia, Mexico and Brazil often have trade deficits, but the United States over several decades has accumulated the world's largest trading deficit.

Information Courtesy of the Bureau of Economic Analysis: U.S. Department of Commerce

The massive U.S. trade deficit, which climbed to over $500 billion in 2016, is a subject of continuous debate. Some economists predict that it will result in the decline of the gross domestic product and in the loss of American manufacturing jobs. These same experts expect the trade deficit to weaken the American dollar, to increase inflation and to promote the sale of U.S. assets to foreign interests. It also makes it easier for countries to become **currency manipulators**. Through the process of selling their own currency and buying foreign cash, such as the U.S. dollar, nations can devalue their own money and gain an advantage in the global marketplace. The diagram below explains how it works.

At the same time, other economists claim that trade deficits are positive. By shifting the production of certain goods to countries outside the United States, American businesses use their resources more efficiently. The dollars that U.S. citizens spend on foreign products eventually have to go somewhere. Often, this cash makes its way back to the United States through investments in American companies. This money funds research, new technology and upgraded equipment. **Milton Friedman** is one economist who believed that Americans needed to rethink their view of the trade deficit. Before his death in 2006, Friedman served as economic advisor to President Ronald Reagan and won a Nobel Prize in economic sciences. In a passage from one of his speeches quoted in the graphic below, he suggests that perhaps we are simply looking at it wrong. Is a deficit bad and a surplus good? According to Friedman, it may be just the opposite.

In the international trade area, the language is almost always about how we must export and what's really good is an industry that produces exports. If we buy from abroad and import, that's bad. But surely that's just upside down as well. What we send abroad we can't eat, we can't wear, we can't use for our houses. The goods and services we send abroad are goods and services not available to us. On the other hand, the goods and services we import provide us with TV sets we can watch, with automobiles we can drive, with all sorts of nice things for us to use. The gain from foreign trade is what we import. What we export is the cost of getting those imports. The proper objective for a nation, as Adam Smith put it, is to arrange things so we get as large a volume of imports as possible for as small a volume of exports as possible.

This carries over to the terminology we use. I have already referred to the misleading terminology of protection. But when people talk about a favorable balance of trade, what is that term taken to mean? It's taken to mean that we export more than we import. But from the point of view of our well-being that's an unfavorable balance. That means we are sending out more goods and getting fewer in. Each of you in your private household would know better than that. You don't regard it as a favorable balance when you have to send out more goods to get less coming in. It's favorable when you can get more by sending out less.

Milton Friedman, 1978
Free Trade: Producer versus Consumer
Landon Lecture Series: Kent State University

Go to Questions 15 through 22.

What's next?

Although international trade has its benefits, workers and businesses sometimes experience its painful side effects as cheaper, foreign goods enter the marketplace. This can result in lost jobs and closed plants. In an attempt to solve these problems, governments add regulations, or trade barriers, to limit the influx of certain goods. Are these measures effective? Do they create more problems than they solve? Do they really save jobs? Before answering these questions in the next unit, review the names and terms found in Unit 15; then, answer Questions 23 through 32.

Go to Questions 23 through 32.