## **International Trade Creates More and Better Jobs**

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Will international trade, if it is not restricted, destroy American jobs? Many people fear it will because American consumers would buy more products made by foreign workers who are paid much less than domestic workers. Supposedly high-paid American workers would either lose their jobs or have to accept lower wages if forced to compete against low-paid foreign workers. Thus, many want the government to impose trade barriers (such as tariffs) to protect domestic firms and their workers from foreign imports competition. Fortunately, economics explains why this fear is largely unfounded. Although some workers will be harmed in the sort run by international trade, in the long run trading with other countries, even low-wage countries, increases wages both here and abroad by creating more productive jobs everywhere.

To understand the gains from international trade, we have to go back to the basic economic problem—scarcity, which results from our inability to produce as many desirable things as we want. An obvious implication of scarcity is that we are better off if we can get more of what we want with fewer workers. If it takes fewer workers to produce food, for example, then we can shift workers into producing more of other valuable products without sacrificing any food production.

The advantage of international trade is that it allows us to get more with fewer workers by using our workers to make goods we produce best and trading some of them for goods that other countries produce best. All countries can have more when each *specializes* in producing the goods in which they have a *comparative advantage* (comparative advantage: the ability to produce a good or service at a lower opportunity cost than some other producer. This is the economic basis for specialization and trade. EconEdLink Glossary).

Comparative advantage is one of the most important concepts in economics and is essential to understanding the gains from international trade. This concept follows directly from scarcity and opportunity cost. A country has a comparative advantage in a product when it can produce it at less cost than other countries. This sounds simple, but it leads to a surprising conclusion—no matter how productive a country is in the production of everything, it cannot produce everything cheaper than other countries, even countries that are much less productive.

Let's illustrate this surprising result with a simple example that considers two goods, computers and cars, and makes the assumption that one country, say America, can produce both goods with fewer resources than can any other country, say Brazil. To keep the discussion really simple, assume that labor is the only productive input. As shown in the table, 500 computers can be produced each month in America with 5 workers and only 125 computers can be produced each month in Brazil with 5 workers. The table also shows that 50 cars a month can be produced in America with 5 workers and only 25 cars a month can be produced in Brazil with 5 workers.

Comparative Advantage and Trade Table

	USA (per 5 workers)	Brazil (per 5 workers)
Cars	50	25
Computers	500	125

America is clearly more productive than Brazil at producing both computers and cars—America has an absolute advantage (absolute advantage: The ability to produce more units of a good or service than some other producer, using the same quantity of resources. EconEdLink Glossary) at producing both goods. But America does not lower opportunity cost (opportunity cost: the second-best alternative (or the value of that alternative) that must be given up when scarce resources are used for one purpose instead of another. EconEdLink Glossary) that must be given up when scarce resources are used for one purpose instead of another. The table shows that the opportunity cost of producing cars in America is greater than producing them in Brazil. The 5 American workers it takes to produce 50 cars could have been producing 500 computers. So the opportunity cost of producing 50 cars in America is 500 computers. In Brazil, it takes 10 workers to produce 50 cars (twice as many workers than in America), but those 10 Brazilian workers could produce only 250 computers.

This means the opportunity cost of producing 50 cars in Brazil is only 250 computers, as opposed to 500 in 2 America. So the opportunity cost of producing cars in Brazil is less than it is in America. Brazil has the comparative advantage in making cars. But the table also shows that America has a comparative advantage in making computers. To produce 500 computers in America takes 5 workers, and they could have been producing 50 cars. But in Brazil, it takes 20 workers to produce 500 computers, and those 20 workers could have been producing 100 cars. So the opportunity cost of producing 500 computers in America is 50 cars, but in Brazil it is 100 cars. It is cheaper to produce computers in America than in Brazil, which means that America has the comparative advantage in computer production.

So even though America is more productive than Brazil in the production of both goods, it does not pay for America to try producing both computers and cars. Both countries can do better by specializing in their comparative advantage and trading with each other. If America offers Brazil computers at a price of 500 computers for 75 cars, America gets 75 cars by giving up 500 computers instead of only 50 cars, which is how many it would get if it produces cars. And Brazil can get 500 computers by giving up 75 cars, instead of only 375 computers for 75 cars, which is what it would get if it produces computers.

Thus, no country can have a comparative advantage in producing everything, even if it is more productive in the production of all goods than any other country. This may sound surprising, but it follows from the fact that the more productive a country is in producing one good, the greater its opportunity cost producing other goods.

The concept of comparative advantage may be easily seen when applied to an individual instead of an entire country. For example, it would make no sense for Tiger Woods to spend some of his time working as a caddy, even though he could be the world's best caddy. Who could give you better advice on which club to use, the right way to grip the club, and how to line up a putt? But because Woods is one of the best golfers in the world, his opportunity cost as a caddy would be extraordinarily high. His comparative advantage is in playing golf. Woods is better off specializing in golf and trading some of the income he earns to pay for a caddy. This caddy is not as good a caddy as Woods could be, but he has a comparative advantage over Woods at caddying.

But when we buy products from other countries, don't we reduce job opportunities in America? No, because scarcity has not been eliminated. Since we all want more than we have, when some American jobs are eliminated because we buy products more cheaply abroad, we release workers to produce more of other valuable products that they can make more cheaply. So international trade directs workers into jobs in which they have a comparative advantage—in which they are most productive. Because greater productivity means higher pay, the result of international trade is higher pay for American workers, not lower pay, which many fear.

Therefore trade restrictions such as tariffs or quotas imposed by the U.S. government on imports to protect domestic manufacturers from imports competition, lower American wages because they keep workers in jobs in which they are less productive. Also, keep in mind that people in countries we trade with also want more. They aren't selling us their products because they want our money, but because they want the things they can buy with that money. Eventually the money we pay for foreign goods comes back to America as demand for the goods that we can make cheapest.

As long as scarcity exists, the problem is not creating jobs, but creating those jobs that produce the most value. The advantage of international trade is that it results in people working in the jobs in which they are most productive. Even those workers who are harmed by international trade in the short run because they have to change jobs (which can require retraining and relocating) are better off. While a worker may want his or her job protected against the competition of international trade, he or she would be worse off if all workers were protected against the competitions because the economy would be much less productive.