CPE Globalization Briefs

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Free Trade and Comparative Advantage

Free trade, meaning trade without government regulation or interference, has become a kind of ideology based on the idea that progress and modernization cannot be achieved without it. But it is important to disentangle the actual economic theories behind free trade from the purely ideological positions taken by many of its proponents.

The main *economic* argument set forth by free trade advocates is that every country has something to gain by liberalizing their trade barriers, regardless of whether they're a developing country or an industrialized country. This line of argument is based on one of the pillars of free trade theory, the principle of comparative advantage. The basic idea is that if governments don't interfere, economic efficiency will be enhanced by specialization and trade, with the result that: 1) the world pie will be larger; and 2) each countries' pie will be larger, too (or at least not smaller).

The Richies and Their Less Efficient Neighbors

In order to explain the principle of comparative advantage, we will go through a simple example. Imagine that there four families who live on neighboring farms, all of whom need to consume rice and beans in order to survive and reproduce themselves. Each family has about the same amount of land, but the land is of very different quality. The Richies have a nice piece of land that is very productive in both beans and rice. The Poors' land is less productive in both crops, but is much better for beans than for rice. The Meagers and the Brokens have farms that produce just like the Poors'.

Initially the families don't trade with one another. Each farm uses half of its land for bean production and half of its land for rice production. The first table below shows how much grain the farms would produce if each one divided land and labor equally between the two crops in this way. Notice that the Richies are better at producing both beans and rice; this is known as *absolute advantage* in trade theory.

Rice and Bean Production when $\frac{1}{2}$ of land for beans, $\frac{1}{2}$ of land for rice

	Beans	Rice
Richies	6	3
Poors	1	2
Meagers	1	2
Brokens	1	2
Total Production	***9***	***9***

To get closer to the principle of comparative advantage, we need to look at this production in terms of what's called opportunity cost, a measure of the efficiency with which each farm family produces beans and rice, indicated in terms of what the family has to give up. Let's start with the Richies: for every pound of rice they produce, they could have produced two pounds of beans. For the Poors, Meagers, and Brokens, for every pound of rice they produce, they could have produced one-half a pound of beans.

So, for the Richies, the opportunity cost of one pound of rice equals two pounds of beans. For the Poors, Meagers, and Brokens, the opportunity cost of one pound of rice equals one-half a pound of beans.

Suppose, at first, that each family decides to specialize in what it does the best. The Richies produce only beans and all the other families produce only rice. With this specialization in what they do best, total production of all the farm families put together is greater for both rice and beans. It is now 12 pounds for each as opposed to only nine pounds in the previous example, as indicated in the table below.

Rice and Bean Production when there is specialization

	Beans	Rice
Richies	12	0
Poors	0	4
Meagers	0	4
Brokens	0	4
Total Production	***12***	***12***

But the families aren't happy producing only one crop, because they all need to consume both beans and rice in order to survive. In comes trade. Imagine that all the families would like to consume the same amount of beans and rice; having more of one than the other makes meals too monotonous. If they exchange beans and rice at a rate of one to one, (so the price of one pound of beans is one pound of rice), all of them will benefit at a rate higher than their opportunity cost: the Richies can exchange one pound of beans for one pound of rice, when it would have cost them two pounds of beans to produce it themselves; for the Poors, Meagers, and Brokens, they can also exchange one pound of rice for one pound of beans, when it would have cost them two pounds of rice to make one pound of beans themselves. This rate of exchange for beans and rice is called the terms of trade. The result of trade is shown in the table below; total production is higher and everyone is better off than before specialization, even despite the fact that the Richies are better at producing both beans and rice (they have an absolute advantage).

After Specialization & Trade

	Beans	Rice
Richies	6	6
Poors	2	2
Meagers	2	2
Brokens	2	2
Total Production	***12***	***12***

This illustrates the theory of comparative advantage: that countries should specialize in producing whatever they are relatively more efficient at producing, and then trade with other countries that are relatively more efficient at producing the other goods needed. Free trade without government interference benefits everyone because it allows countries to specialize in producing what they are good at and then exchange it in the world market. The result is larger total world production and the potential for every country, depending on its terms of trade, to increase its welfare by having more, better, and a wider variety of goods to choose from. So in the theory of comparative advantage, specialization plus free trade equals gains from trade.

Critiquing Comparative Advantage

Its Assumptions The theory of comparative advantage makes some significant assumptions in order to get its "everyone benefits from free trade" conclusion. To see why this is so, think of the families in the example above as countries, with a multitude of citizens producing beans and rice.

First, consider what happens if the Poors open their borders to free trade – all the bean producers go out of business because of import competition (remember, the Poors are now producing only rice because of their comparative advantage). Instead of resources simply being switched to rice production, workers get laid off and the land goes idle. All of the gains from trade could be outweighed by the costs of unemployment and less domestic production. In order to get around this problem, the theory of comparative advantage assumes full employment – that NO UNEMPLOYMENT EXISTS, hardly a realistic assumption for most economies.

Second, in the process of specialization, comparative advantage assumes that everything used in one type of production can be automatically re-deployed to another type of production. In other words, the skills of workers are instantly transferable from one type of production to the other, the same machinery and equipment are used, and the same inputs. The theory ignores the fact that, often, when switching from one type of production to another, workers need to be re-trained and new investment in different types of equipment needs to be made. All of this costs resources – costs that can reduce the gains from trade. The theory of comparative advantage assumes that RESOURCES ARE PERFECT SUBSTITUTES.

Finally, the theory of comparative advantage assumes that producers don't move between countries. Therefore, the beans producers in the country of Richies can't move all their production to the Poors, Meagers, or Brokens. While this might seem reasonable if we're talking only about rice and beans (due to climate variations, etc), it doesn't make as much sense when we are discussing shoes and automobiles. Therefore, the theory assumes FREE MOVEMENT OF GOODS AND SERVICES, but at the same time it assumes NO FREE MOVEMENT OF PRODUCTION. This unrealistic assumption greatly compromises the theory.

Comparative Advantage vs. Constructed Advantage The U.S. produces and exports a large amount of computer software to other countries. Many developing economies export only one or two major raw materials to industrialized countries. According to the theory of comparative advantage, such specialization occurs simply because the U.S. is better at producing high-value exports (such as computer software) and poorer countries are better at producing unprocessed raw materials (such as copper ore), often at low commodity prices. But is this really the case? Is it really because of a "natural" ability to produce certain goods or services, or are some other factors at play?

The United States is better at producing computer software because, among other things:

- it has access to money and capital to invest in such industries;
- it has a trained and educated workforce;
- it has infrastructure to support such industries;
- it has access to markets for its products.

All of these factors aren't unique to the United States. Other countries could develop such potential as well. The advantage the United States has in trade might be more accurately described as a *constructed advantage* – instead of some sort of natural superiority. The export-led development of countries like Taiwan, South Korea, and Singapore have been based on a type of constructed advantage, where government intervention built up and protected industries until they could compete on a world scale. The idea of constructed advantage can be an important part of what's been called "fair trade," an alternative to free trade that preserves the advantages of trade while protecting other features and capabilities important to communities, such as labor and the environment.

The Distribution of the Gains From Trade The theory of comparative advantage says nothing about who gets the "gains from trade." Even if you accept the assumptions of the principle of comparative advantage and believe that free trade raises total income of a country, there is nothing about the theory that indicates that everyone is automatically better off. These benefits could, instead, accrue only to business owners in the form of increased profits. Although there may be gains to be had, how they get distributed is a part of the political process, and there is the possibility that workers and communities could become worse off as a result.

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