Comparative Advantage versus Absolute Advantage

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A person has a **comparative advantage** at producing something if he can produce it at lower cost than anyone else.

Having a comparative advantage is not the same as being the best at something. In fact, someone can be completely unskilled at doing something, yet still have a comparative advantage at doing it! How can that happen?

First, let's get some more vocabulary. Someone who is the best at doing something is said to have an **absolute advantage.** Lance Armstrong has an absolute advantage at cycling. For all I know, Lance Armstrong may also be the fastest typist in the world, giving him an absolute advantage at typing, too. Since he's better at typing than you, can't he type more cheaply than you? That is, if someone has an absolute advantage in something, doesn't he automatically have a comparative advantage in it?

The answer is no! If Lance takes time out from cycling to do all his own typing, he sacrifices the large income he earns from entertaining fans of the Tour de France. If, instead, his secretary does the typing, the secretary gives up an alternative secretarial job—or perhaps a much lower salary as a cyclist. That is, the secretary is the lower-cost typist. The secretary, not Lance Armstrong, has the comparative advantage at typing! The trick to understanding comparative advantage is in the phrase "lower cost." What it costs someone to produce something is the **opportunity cost**—the value of what is given up. Someone may have an absolute advantage at producing every single thing, but he has a comparative advantage at many fewer things, and probably only one or two things. (In Lance's case, both cycling and also as the entrepreneur behind the yellow LiveStrong wristband.)

Amazingly, everyone always has a comparative advantage at something. Let's look at another example. Suppose you and your roommate want to clean the house and cook a magnificent Chicken Kiev dinner for your friends one night. The easy case is when you are each better at one activity. If you are an accomplished chef, while your roommate doesn't know the range from the oven; and if after you vacuum the carpet the dust bunnies have shifted from under the sofa to under the coffee table, while your roommate can vacuum, dust, and polish the silverware faster than you can unwrap the vacuum-cleaner cord, then you and your roommate will each be better off if you cook and your roommate cleans. It's easy to see that you each have a comparative advantage in one activity because you each have an absolute advantage in one activity.

But what if your roommate is a veritable Martha Stewart, able to cook *and* clean faster and better than you? How can you earn your keep toward this joint dinner? The answer is to look not at her absolute advantage, but at your *opportunity costs.* If her ability to cook is much greater than yours but her ability to clean is only a little better than yours, then you will both be better off if she cooks while you clean. That is, if you are the less expensive cleaner, you should clean. Even though she has an absolute advantage at everything, you still each have different comparative advantages.

The moral is this: **To find people's comparative advantages, do not compare their absolute advantages. Compare their opportunity costs.**

The magic of comparative advantage is that everyone has a comparative advantage at producing something. The upshot is quite extraordinary: Everyone stands to gain from trade. Even those who are disadvantaged at every task still have something valuable to offer. Those who have natural or learned absolute advantages can do even better for themselves by focusing on those skills and buying other goods and services from those who produce them at *comparatively* low cost. (Even more surprising is that the absolutely disadvantaged may gain more from the resulting trade than the absolutely advantaged; but that's a different topic.)

When **David Ricardo** first illustrated the importance of comparative advantage in the early 1800s, he solved a problem that had eluded even **Adam Smith.** Comparative advantage explains why a country might produce and export something its citizens don't seem very skilled at producing when compared directly to the citizens of another country! (For example, in the past few years India has become a major supplier of phone-answering services for the American market, even though their English-language skills are not up-to-par.) The explanation of the apparent paradox is that the citizens of the importing country must be *even better* at producing something else, making it worth it for them to pay to have work done by the exporting country. Amazingly, the citizens of each country are better off specializing in producing only the goods at which they have a comparative advantage, even if one country has an absolute advantage at producing each item.

One of the clearest explanations of comparative advantage ever written was in fact one of the first explanations ever written. In 1821, James Mill saw that Ricardo's exposition was hard to understand, so he clarified it in his *Elements of Political Economy,* excerpted **below.** Explanations since Mill's typically rely on ever-updated examples and extensions to the understanding of opportunity costs other than just labor, but Mill's exposition still retains the fresh clarity of someone trying to sort out for himself a topic that is naturally confusing.

Lauren F. Landsburg

Excerpts

From ***On the Principles of Political Economy and Taxation*** by David Ricardo. London: John Murray, 1821. First published 1819. **Card Catalog**

To produce the wine in Portugal, might require only the labour of 80 men for one year, and to produce the cloth in the same country, might require the labour of 90 men for the same time. It would therefore be advantageous for her to export wine in exchange for cloth. This exchange might even take place, notwithstanding that the commodity imported by Portugal could be produced there with less labour than in England. Though she could make the cloth with the labour of 90 men, she would import it from a country where it required the labour of 100 men to produce it, because it would be advantageous to her rather to employ her capital in the production of wine, for which she would obtain more cloth from England, than she could produce by diverting a portion of her capital from the cultivation of vines to the manufacture of cloth. [par. 7.16 (See also pars. 7.13-7.15)]

A great manufacturing country is peculiarly exposed to temporary reverses and contingencies, produced by the removal of capital from one employment to another. The demands for the produce of agriculture are uniform, they are not under the influence of fashion, prejudice, or caprice. To sustain life, food is necessary, and the demand for food must continue in all ages, and in all countries. It is different with manufactures; the demand for any particular manufactured commodity, is subject not only to the wants, but to the tastes and caprice of the purchasers. A new tax too may destroy the comparative advantage which a country before possessed in the manufacture of a particular commodity; or the effects of war may so raise the freight and insurance on its conveyance, that it can no longer enter into competition with the home manufacture of the country to which it was before exported. In all such cases, considerable distress, and no doubt some loss, will be experienced by those who are engaged in the manufacture of such commodities; and it will be felt not only at the time of the change, but through the whole interval during which they are removing their capitals, and the labour which they can command, from one employment to another. [**Chapter 19** par. 19.1]

From ***Elements of Political Economy*, Chapter III, Section IV** by James Mill. London: Henry G. Bohn, 1844. First published 1821. **Card Catalog**

These are all obvious causes. There is another cause, which requires rather more explanation. If two countries can both of them produce two commodities, corn, for example, and cloth, but not both commodities, with the same comparative facility, the two countries will find their advantage in confining themselves, each to one of the commodities, bartering for the other. If one of the countries can produce one of the commodities with peculiar advantages, and the other the other with peculiar advantages, the motive is immediately apparent which should induce each to confine itself to the commodity which it has peculiar advantages for producing. But the motive may no less exist, where one of the two countries has facilities superior to the other in producing both commodities.

By superior facilities, I mean, the power of producing the same effect with less labour. The conclusion, too, will be the same, whether we suppose the labour to be more or less highly paid. Suppose that Poland can produce corn and cloth with less labour than England, it will not follow that it may not be the interest of Poland to import one of the commodities from England. If the degree, in which it can produce with less labour, is the same in both cases; if, for example, the same quantity of corn and cloth which Poland can produce, each with 100 days' labour, requires each 150 days' labour in England, Poland will have no motive to import either from England. But if, at the same time that the quantity of cloth, which, in Poland, is produced with 100 days' labour, can be produced in England with 150 days' labour; the corn, which is produced in Poland with 100 days' labour, requires 200 days' labour in England; in that case, it will be the interest of Poland to import her cloth from England. The evidence of these propositions may thus be traced.

If the cloth and the corn, each of which required 100 days' labour in Poland, required each 150 days' labour in England, it would follow, that the cloth of 150 days' labour in England, if sent to Poland, would be equal to the cloth of 100 days' labour in Poland: if exchanged for corn, therefore, it would exchange for the corn of only 100 days' labour. But the corn of 100 days' labour in Poland was supposed to be the same quantity with that of 150 days' labour in England. With 150 days' labour in cloth, therefore, England would only get as much corn in Poland as she could raise with 150 days' labour at home; and she would, on importing it, have the cost of carriage besides. In these circumstances no exchange would take place.

If, on the other hand, while the cloth produced with 100 days' labour in Poland was produced with 150 days' labour in England, the corn which was produced in Poland with 100 days' labour could not be produced in England with less than 200 days' labour; an adequate motive to exchange would immediately arise. With a quantity of cloth which England produced with 150 days' labour, she would be able to purchase as much corn in Poland as was there produced with 100 days' labour; but the quantity, which was there produced with 100 days' labour, would be as great as the quantity produced in England with 200 days' labour. If the exchange, however, was made in this manner, the whole of the advantage would be on the part of England; and Poland would gain nothing, paying as much for the cloth she received from England, as the cost of producing it for herself.

But the power of Poland would be reciprocal. With a quantity of corn which cost her 100 days' labour, equal to the quantity produced in England by 200 days' labour, she could in the supposed case purchase, in England, the produce of 200 days' labour in cloth. The produce of 150 days' labour in England in the article of cloth would be equal to the produce of 100 days' labour in Poland. If, with the produce of 100 days' labour, she could purchase, not the produce of 150, but the produce of 200, she also would obtain the whole of the advantage, and England would purchase corn, which she could produce by 200 days' labour, with the product of as many days' labour in other commodities. The result of competition would be to divide the advantage equally between them. [Par. III.IV.3-7]