## The Principles of Comparative Advantage: Why Tiger Woods Shouldn't Mow Your Lawn

In economics, comparative advantage refers to the ability of a person or nation to produce a good or service at a lower opportunity cost than another person (or nation). This is why trade can create value for both parties—because each person can concentrate on the activity for which they have the lower opportunity cost. It also explains why Tiger Woods shouldn't mow your lawn.

The term "comparative advantage" is usually attributed to David Ricardo. In his 1817 book On The Principles Of Political Economy And Taxation

(http://www.amazon.com/gp/product/0486434613?ie=UTF8&tag=farnamstreet20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0486434613), Ricardo used the example of trade between England and Portugal.

Portugal could produce both wine and cloth with less labor than it would have taken to produce the same output in England. However, the relative costs are different (currencies have different values). From Ricardo's point of view, England had difficulty producing wine and very little difficulty producing cloth. Portugal, however, could easily produce both wine and cloth. Ricardo concluded that while it was cheaper to produce cloth in Portugal than England, it is cheaper still for Portugal to produce excess wine and trade this for English cloth. England would benefit from this trade because its cost of producing cloth has not changed but it can now get wine at a lower price. Thus, each country can gain by specializing in the good that has a comparative advantage.

One of the drawbacks of trade in this way is that it creates increasing interdependence among people or nations. In Ricardo's example, England and Portugal relied on each other for certain goods. This is possible as long as it is in the self-interest of each nation and there are no disruptions.

In the leading economics textbook, Principles of Microeconomics, Greg Mankiw offers the following:

Differences in opportunity cost and comparative advantage create the gains from trade. When each person specializes in producing the good for which he or she has a comparative advantage, total production in the economy rises, and this increase in the size of the economic pie can be used to make everyone better off. In other words, as long as two people have different opportunity costs, each can benefit from trade by obtaining a good at a lower price than his or her opportunity cost of that good.

## **Real Life Examples**

Should Tiger Woods Mow His Own Lawn?

Tiger is a great athlete. One of the best golfers to have every lived. Most likely he is better at other activities too. Tiger is probably in better shape than most: He can run faster, lift more, and work quicker. For example, Tiger can probably mow his lawn faster than anyone else. But just because he can mow his lawn fast, does this mean he should?

To answer this question we can use the concepts of opportunity cost and comparative advantage. Let's say that Tiger can mow his lawn in 2 hours. In the same two hours he could film a television commercial for golf clubs and earn \$100,000. By contrast, Joe, the kid next door can mow Tiger's lawn in 4 hours. In that same 4 hours he could work at McDonald's and earn \$24.

In this example, Tiger's opportunity cost is \$100,000 and Joe's is \$24. Tiger has an absolute advantage in mowing lawns because he can do the work in less time. Yet Joe has a comparative advantage because he has the lower opportunity cost. The gains in trade from this example are tremendous. Rather than mowing his own lawn, Tiger should make the commercial and hire Joe to mow his lawn. As long as Tiger pays Joe more than \$24 and less than \$100,000, both of them are better off.

(Another example, this one from wikipedia)

Two men live alone on an isolated island. To survive they must undertake a few basic economic activities like water carrying, fishing, cooking and shelter construction and maintenance. The first man is young, strong, and educated. He is also, faster, better, more productive at everything. He has an absolute advantage in all activities. The second man is old, weak, and uneducated. He has an absolute disadvantage in all economic activities. In some activities the difference between the two is great; in others it is small.

Despite the fact that the younger man has absolute advantage in all activities, it is not in the interest of either of them to work in isolation since they both can benefit from specialization and exchange. If the two men divide the work according to comparative advantage then the young man will specialize in tasks at which he is most productive, while the older man will concentrate on tasks where his productivity is only a little less than that of a young man. Such an arrangement will increase total production for a given amount of labor supplied by both men and it will make both of them richer.

## **READ NEXT**

## Charlie Munger Explains Why Bureaucracy is not Shareholder Friendly



