The Concept of Comparative Advantage Is Sometimes Mishandled in Discussions of International Trade

Comparative advantage, on its face, is indeed a difficult idea. Our unexamined gut reaction to the question "who should do X?" is to say "the person who is best at X." Part of the confusion of comparative advantage rises from this word "best." Best according to what metric? Typically, people use "best" in an absolute manner: who can, in absolute terms, produce the most.

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Nobel Prize economist Paul Samuelson, when asked to name a social science proposition that is both true and non-trivial, proposed the idea of comparative advantage. He argued that comparative advantage is logically true given the mathematics behind it, and it is non-trivial because of "thousands of important and intelligent men who have never been able to grasp the doctrine for themselves or to believe it after it was explained to them." Present-day trade economist Paul Krugman agrees, calling comparative advantage "Ricardo's difficult idea."

Comparative advantage, on its face, is indeed a difficult idea. Our unexamined gut reaction to the question "who should do X?" is to say "the person who is best at X." Part of the confusion of comparative advantage rises from this word "best." Best according to what metric? Typically, people use "best" in an absolute manner: who can, in absolute terms, produce the most. If a senior lawyer can write 8 briefs in a day and his junior partner can write 2 briefs a day, the senior lawyer should write the briefs because he is "best" at it. Likewise, if the senior lawyer can spend the same amount of time and write 4 divorce settlements and his junior partner can write 2 divorce settlements, it may seem like it's best for the senior lawyer to write the divorce settlements as well. Why, then, does the senior lawyer employ a junior partner? The answer is because the senior lawyer's time is scarce: every minute he spends writing a brief is one minute he cannot be writing a settlement. It would make sense for him to employ a junior partner to free up some of his time.

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When economists use the word "best," we mean whoever can produce with the lowest cost; it does not always make sense for one person to do everything.

In our example above, let's say that each day is 8 hours. Thus, the senior lawyer can spend his 8-hour day either writing 4 divorce settlements or writing 8 briefs. His partner can spend the same day writing 2 divorce settlements or writing 2 briefs. The (opportunity) cost1 for the senior lawyer of one settlement is 2 briefs. Alternatively, the cost of one brief is 1/2 a settlement. For the junior partner, her cost of writing settlements is writing 1 brief. Conversely, her cost of writing a brief is 1 settlement. This is represented in Table 1 below:

Cost of doing one of each:	Senior lawyer	Junior Partner
Divorce Settlement	2 briefs	1 brief
Briefs	½ divorce settlement	1 divorce settlement

We can quickly see, then, that each lawyer has different costs facing them for the same tasks. If the each specialize in the tasks that incur the lowest cost, they can combine their forces and produce both more briefs and settlements then they could do alone. In our example above, the senior lawyer would specialize in writing briefs (since it only costs him ½ of a settlement, as opposed to 1 settlement for the junior partner) and the junior partner would specialize in settlements (since it only costs her 1 brief whereas it costs the senior lawyer 2 briefs).

By specializing according to their comparative advantage (what they do at least cost), they can produce a total of 8 briefs and 2 divorce settlements. If the senior lawyer divided his time evenly and did it all himself, he would produce 4 briefs and 2 divorce settlements. Producing by comparative advantage creates more output than relying on just the person who is absolutely "best."

A Common Misconception

The fundamentals of comparative advantage that I discussed here are the foundation of Samuel Gregg's January 6 essay at the Law & Liberty Blog entitled "How Economic Nationalism Hurts Nations." In subsequent essays, Oren Cass and Daniel McCarthy responded, objecting to various elements of comparative advantage. Gregg replied to those responses. I would like to highlight an aspect of Gregg's reply to Cass and McCarthy that, while correct, I think contributes to some of the confusion regarding comparative advantage. In Gregg's response to Cass and McCarthy, Gregg writes (emphasis added):

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But Cass's conception of comparative advantage isn't how economists understand comparative advantage. They have always recognized, as Donald J. Boudreaux states, that comparative advantage isn't static. It can be affected by, for instance, political and institutional factors like the degree to which rule of law prevails in a given country. In more recent decades, some economists and economic historians have stressed the importance of values, expectations, and culture in shaping a **nation's** comparative advantages.

The very fact, however, that a **country's** comparative advantages are constantly changing is, if anything, yet another reason to be wary about experts who think they can second-guess the workings of markets via some combination of industrial policy and tariffs.

I emphasized the words "nation" and "country" because this is where the confusions lie: nations (countries, counties, etc.) do not have comparative advantages. Only individuals can have comparative advantages.

As discussed above, comparative advantage is when one economic agent has a lower cost of producing a good/service than another economic agent to whom they are being compared. Since cost is tied up in choice, the economic agent that faces a cost must be one that faces and can make a choice. If no choice is made, no cost is incurred, and thus no comparative advantage exists. A country or a nation (or some other collective body) does not make choices. There may be designated choice-makers (e.g., a legislature or governing board or dictator), but the country as an entity does not choose. Thus, the country does not face costs and cannot have a comparative advantage (or disadvantage). In a literal sense, one cannot speak of national comparative advantage. Textbooks do as a means of demonstrating the logic of international trade, but they are simply a heuristic device. We must always remember to ask the question "Who chooses?"

To speak of "national comparative advantage" implies a uniformity of the individuals in a country that does not, nay cannot, exist in real life. To say as a literal thing that "the United States has comparative advantage in X" would mean that every single person in the United States has comparative advantage in X. Obviously, this conclusion is silly. Surely the myriad of economists since Ricardo who have studied comparative advantage would have noticed such a silly conclusion by now. Are Cass and McCarthy really the first to observe this fantastic error in the very foundation of the logic of trade? Of course not: economists remember that the individual is the foundational economic unit; we practice methodological individualism.

Methodological individualism and individual comparative advantage also explain why we see intra-industry trade. Intra-industry trade is a situation where a country both buys and sells products within a given industry (for example, the United States both exports and imports cars). Standard trade theory attributes intra-industry trade to economies of scale and monopolistic competition, 2 which play a role, but we can also arrive at the same outcome with individual comparative advantage. That individuals, rather than countries, face comparative advantages, and thus specialize, indicate that the geography of the

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individuals is irrelevant. It's not unreasonable for multiple individuals with comparative advantage in a particular good to exist in multiple places in the world. Again, since comparative advantage depends on the relevant comparison, these multiple individuals could all find willing trade partners.

In conclusion, let me address one other potential pitfall. Sometimes, the fact that a country produces a lot of good X is used to claim that the country has a comparative advantage in that good. For example, someone might say that Saudi Arabia has a comparative advantage in oil because they are one of the largest producers of oil in the world. As long as one remembers that phrasing is just short-hand for saying that many individuals within Saudi Arabia have comparative advantage, then there is no issue with the statement as given. However, if one fails to remember that comparative advantage is subjective and thus belongs to individuals, it can lead to erroneous conclusions, such as the need to "protect" said industry for social well-being

Discussion Questions

- What do economists mean when they use the phrase "best at it"?
- Who has the comparative advantage in making cakes? Why should this person
- specialize in making cakes?

Cost of doing one each	Baker	Apprentice
Cakes	2	1
Cookies	1/2	1

- Why isn't comparative advantage "static"? (Why is it always changing?)
- Why can't a country have comparative advantage?
- What is intra-industry trade?
- What happens if one fails to remember comparative advantage is subjective and belongs to individuals?

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