

Comparative advantage and capital

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The part the liberals miss So country A has the infrastructure to make cheap stuff, like it costs twenty dollars to make a car worth forty, and it costs ten dollars to make a bike worth twenty. Country B isn't so efficient, so it needs to spend more to make these things, as depicted in the following table:

	A production	B production	profit margin	value
Cars	\$20	\$30	\$8	\$40
Bikes	\$10	\$15	\$3	\$20

So say that there are two people in Country A and two in Country B, and each can produce one item at a time. The first option is the closed-borders option: we'll give them \$60 to start off with, and one citizen of B produces one car (selling for \$38), one citizen of B produces one bike (selling for \$18), and they buy each other's goods and make a profit of \$11 total, winding up with a car and a bike:

Country B (self-sufficient):

	before	after	after value
cars	0	1	40
bikes	0	1	20
car profit	0	8	8
bike profit	0	3	3
cash	60	4	4
total	60		75

[How to read this: we started with \$60 in cash, and spent \$38 of it to buy a (domestically built) car and \$18 of it on a domestic bike, so we have only \$4 in original cash left. For the car, \$30 disappears into the production of the car (materials, wages), and \$8 is cash profit which just moved from the 'general cash' row to the 'car profit' row; similarly for the bike. Finally, the car provides \$40 in value, even though we can't convert it back to cash, so we count 1 car as \$40 in the final column; similarly for the bike.]

The second is the open-border option, e.g., buying a car (\$28) and a bike (\$13) from country A:

Country B (buy everything from A):

	before	after	after value
cars	0	1	40
bikes	0	1	20
car profit	0	0	0
bike profit	0	0	0
cash	60	19	19
total	60		79

[Buying from A is cheaper, so there's more left in the 'cash' row, but all the profits go abroad, so the 'profit' rows are left blank.]

B is better off, because everybody bought from the most efficient producer, so they got more for their buck. Note well that we don't really care where the cash is: it's the value that matters, in whatever form that value may be.

So point one: you want to buy from the most efficient producer, wherever that producer may be.

But I'd ignored what country A will do. With only two people, it can only produce two items. That leaves them the choice between making two cars, two bikes, or a car and a bike. The biggest profits are in cars, so they will produce two cars; country B will produce bikes, since nobody else is doing it. Both sides will buy one car and one bike, since that's what they want, so here's the final score after both countries buy one bike from country B (\$18) and one car from country A (\$28):

Country A (free trade):

	before	after	after value
cars	0	1	40
bikes	0	1	20
car profit	0	16	16
bike profit	0	0	0
cash	60	14	14
total	60		90

Country B (free trade):

	before	after	after value
cars	0	1	40
bikes	0	1	20
car profit	0	0	0
bike profit	0	6	6
cash	60	14	14
total	60		80

So point two: even if a country has an absolute advantage in producing some good, it's the advantage compared to other goods that matters. Country A can't produce all the world's bikes and all the world's cars, so it has to choose, and it'll choose the cars, leaving country B to produce bikes even though it's not as efficient.

It may look like the numbers are cooked, but the principle of comparative advantage is pretty robust to all sorts of shifts. This division of production is typically the optimum both for society and all the players within, given the constraints on each country's ability to produce. You can try other options for country A and will see that they can't do better than producing all cars and leaving B to produce all bikes, and that this is the value-maximizing setup for the world at large.

If the developing country, country B, were to close its borders to more efficient markets elsewhere, it would protect its car market, but makes itself worse off in the process because now people have to pay more for their cars. This ignores adjustment costs, assumes that there exist alternatives like bike production, and makes a hundred other simplifications; the real world can interfere with the theory, but the theory by itself says that open borders are good for all involved.

The part the conservatives miss Around borders in the real world, capital flows freely; goods sometimes flow freely; labor rarely flows freely.

Let us say that all of the factories in country B are owned by country A, which will have two effects: thanks to good ol' country A know-how, production is now more efficient, so instead of \$30 to produce a car, it now takes \$25, and instead of \$15 to produce a bike, it takes \$12.50; also, all profits from production go to country A. Now let us say that the borders are closed to goods, but capital moves freely: then country B will produce a bike and a car, buy a bike (\$15.50) and a car (\$33), and be left with:

Country B (no free trade, capital owned by A):

	before	after	after value
cars	0	1	40
bikes	0	1	20
car profit	0	0	0
bike profit	0	0	0
cash	60	11.50	11.50
total	60		71.50

Country B is worse off than it was with completely closed borders, because it is more efficient but much of the value added from production leaves the country. The reader is welcome to do the math with free trade and free capital movement simultaneously, and will see that country B is marginally worse off [If you don't feel like doing the math yourself, look at this essay's HTML comments], but I could have just as easily cooked the numbers so that the combination makes country B better off. Plus we have a comparable list of practical issues, which I won't bore you with.

The moral Comparative advantage in the trade of goods has *nothing to do* with the effects of capital movement. Although there are robust results that tell

us that free trade in goods helps all parties, that doesn't tell us anything about whether it is good for countries to open their borders to capital investments from the outside. A country which opens its borders to both the import of goods and capital investment may or may not fare as well as one which has totally closed borders.

It may be advisable for a country to allow full movement of goods, but remain reticent in accepting those capital investments which could drain value from the country in the long run. But in real life this is impossible because the two are bundled together: opening a McDonald's in, say, Sudan means that food is being exported cheaply, but U.S. capital comes with it in the form of a restaurant where the food will be served. NAFTA allowed everything that isn't a human being to drift across the border, so there are now both U.S. goods *and* factories in Mexico. The economic analysis of such a situation is not very simple. The hardcore liberals are wrong to ignore the benefits from trade for developing countries, and the hardcore conservatives are wrong to chant the comparative advantage mantra when dealing with the unrelated question of capital investment by wealthy nations in developing countries.