# Does Increased International Mobility of Factors of Production Weaken the Case for Free Trade?

*Donald J. Boudreaux*

Economist Paul Craig Roberts has recently argued, with some fanfare, that increases in the ability of factors of production to migrate internationally threaten to create conditions under which free trade no longer benefits all countries. These pronouncements are especially troubling. Roberts (unlike, say, protectionists Pat Buchanan and Lou Dobbs) is a professional economist with a genuine free-market bent to his work; his public skepticism of free trade is expressed in prestigious publications such as the *New York Times*; and he has formed an intellectual coalition skeptical of free trade with prominent members of Congress (most notably, Sen. Charles Schumer, D-N.Y., with whom he coauthored an op-ed in the *Times*).

## Factor Mobility, Absolute Advantage, and Comparative Advantage

The bedrock justification for free trade is the principle of comparative advantage, articulated most famously in Chapter 7 of David Ricardo's *Principles of Political Economy and Taxation* (1817). This principle shows that a country can benefit from international trade even if it can produce each and every good and service in greater quantities than these things can be produced abroad, or, at the opposite end of the spectrum, even if it can produce everything only in smaller quantities than these can be produced abroad. In textbook models of comparative advantage, some factors of production are assumed to be internationally immobile.

Roberts argues that the factor immobility assumed in textbook

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Donald J Boudreaux is Professor of Economics at George Mason University. He thanks Manuel Ayau, Karol Boudreaux, Kevin Brancato, Bill Field, Bob Higgs, Doug Irwin, Dwight Lee, George Leef, David Levy, Hugh Macaulay, Roger Meiners, Tom Palmer, Sheldon Richman, Russ Roberts, Jack Wenders, and Walter Williams for useful discussion and comments.

models of comparative advantage is absolutely critical to the principle's applicability. As Schumer and Roberts (2004) put it, "Comparative advantage is undermined if the factors of production can relocate to wherever they are most productive. . . . In this situation, there are no longer shared gains—some countries win and others lose."

Roberts elaborates this point on the mises.org blog: "As economists have known for two centuries, the opportunity cost of one good in terms of another depends on the factors of production. If the factors of production can pick up and leave for greener pastures abroad, the internal cost ratios that determine a country's comparative advantage are gone with the factors of production." Elsewhere on the mises.org blog he insists that "If the factors can leave, they do not specialize within the country where they have a comparative advantage. They can move abroad where there is absolute advantage. . . . Consider, for example, a trading country specializing according to comparative advantage. Now introduce new developments that create opportunity for capitalists to reallocate productive factors from comparative advantage at home to absolute advantage abroad. The result is a collapse in the conditions under which free trade produces mutual gains to trading countries."[1]

Paul Craig Roberts does not understand the principle of comparative advantage. There are only two ways for international factor mobility to deprive a country—call it "Ricardia"—of all comparative advantage and, hence, deny that country the opportunity to gain from specialization and trade with people in other countries. Both of these ways are extraordinarily unlikely; they are the equivalent of a single monkey banging on a typewriter and by chance typing Hamlet.

One way is when factor mobility causes an international reshuffling of factors of production that results in every country in the world having the same internal costs as Ricardia of producing each and every good and service.[2] If such a outcome were to emerge, it would indeed be true that factor mobility eliminated all comparative advantage (*and* comparative disadvantage) for Ricardia with respect to every other country in the world. Also, all potential gains to the people of Ricardia from *international* specialization and trade would be eliminated. (Comparative advantage will continue to drive

[1]These quotations can be found at www.mises.org/blog/archives/roberts_again_replies_to_boudreaux_000622.asp; www.mises.org/blog/archives/roberts_replies_again_000632.asp; and www.mises.org/blog/archives/the_real_issue_001462.asp.

[2]I here ignore transportation costs and other costs of trading internationally. Such costs create no fundamental change to this description of the conditions under which no country has a comparative advantage at the production of any good or service over any other country.

specialization and trade within Ricardia.) There will be no international trade for Ricardia's government to prevent or to regulate.

Nothing in this scenario suggests that the factor mobility that brought about the equivalence of all costs in Ricardia with those of the rest of the world will worsen the lot of the people of Ricardia or of any other country. When factors of production migrate, they go to where their returns are highest, which generally means to where their productivity is greatest. With all factors of production better able to find employment anywhere in the world in more productive uses, some factors will leave Ricardia for elsewhere and other factors from elsewhere will migrate into Ricardia. This increased productivity brought about by greater factor mobility means that the wealth of nations rises.

A second way for factor mobility to strip a country of comparative advantage is when literally *all* factors of production leave that country and relocate elsewhere. I suspect that the theoretical curiosity that makes this second scenario just barely possible is the source of Roberts's confusion.

Suppose that one country—call it "Advantia"—enjoys an absolute advantage in the production of everything. Advantia's climate and resources are overwhelmingly propitious for amazingly efficient production of every conceivable good and service. David Ricardo and other trade theorists show that the people of Advantia can still gain from specializing in the production of those things for which they enjoy a comparative advantage and trading freely with people in other countries.

No economist ever believed that any real-world Advantia exists or could possibly exist. The point of making such a far-fetched assumption is to show the surprising and universal power of the principle of comparative advantage. If people in a country with such enormous advantages as those of the mythical Advantia can nevertheless gain from trading with countries less favorably blessed, then it is much easier to understand why people in real-world countries benefit from free trade.

To demonstrate this counterintuitive truth that even the people of Advantia can gain from international trade, economists often assume that some factors of production cannot move to Advantia. The reason is that if Advantia's advantage—some call it "absolute advantage"[3]—is so overwhelming, then if all factors of production can freely move they will all migrate to Advantia.

[3]Although commonly used even by economists, the term "absolute advantage" is surprisingly slippery, as is the concept that it refers to (Brandis 1968).

Roberts treats low-wage places such as Indonesia, India, and Mexico as real-world Advantias. He worries that the increasing ability of factors of production to move internationally will soon result in capital from high-wage countries such as the United States fleeing en masse to these real-world Advantias. And he tries to ground his concern in accepted economic theory, going so far as to argue that it is a well-understood fact that when all factors of production are internationally mobile the principle of comparative advantage and the case for free trade no longer apply.

For Advantia's "absolute" advantage to render the principle of comparative advantage inapplicable to international trade, literally *all* factors of production—or, at least, all people—must move to Advantia. If even a single person remains in a country other than Advantia, then this person will almost certainly enjoy a comparative advantage at producing some quantity of some good or service over the people of Advantia, and mutually advantageous international trade will therefore be possible.

Because Roberts is unlikely to believe that the United States will become fully depopulated, he is emphatically misguided when he argues that increased factor mobility renders the principle of comparative advantage (and the case for free trade built upon it) inapplicable.[4]

## The Supply of Capital Is Not Fixed

Paul Craig Roberts's real concern may be that greater international mobility of capital[5] will *change* the international pattern of comparative advantage to one in which the United States and other industrialized countries suffer a surplus of labor that can be remedied only by falling wage rates. If much of the capital that has made American workers so productive (and, hence, so highly paid) moves to countries with a more abundant labor supply, American workers' comparative advantages might shift from industries featuring specialized and highly productive capital equipment to industries characterized by production methods that are more labor-intensive. With much of the

[4]Of course, if the extreme case actually happens and a country (Ricardia) is completely depopulated by factor movements to Advantia, then the truth that this depopulated landmass no longer has a comparative advantage is utterly trivial. No one lives there. Ricardia is no longer a country in any meaningful sense. Lamenting the absence of comparative advantage and trade between still-populated countries and the now-empty landmass that cartographers might still label "Ricardia" makes no more sense than lamenting the absence of comparative advantage and trade between Earth and Jupiter.

[5]By "capital" I mean capital goods—factories, machines, research institutes, and the like.

capital that they once worked with drained away into India, Malaysia, Mexico, and other low-wage countries, American workers' wages will fall as their productivity falls and as more and more of them compete to work alongside the ever-diminishing stock of capital located in America.

Roberts's concern not only does not render the principle of comparative advantage inapplicable, it is connected only incidentally to the increased international mobility of factors of production. International mobility of factors of production is not necessary for workers who today enjoy a comparative advantage in capital-intensive industries to lose that advantage and tomorrow find that their comparative advantage has shifted to industries that are more labor-intensive. Free trade in goods and services alone can cause such a shift, even with each piece of capital lodged firmly in place within the country in which it first emerges. If, for example, investors build automobile factories in Malaysia, Malaysia might come to have a comparative advantage in automobile production. Auto imports into the United States from Malaysia might well bankrupt General Motors and Ford and make it necessary for thousands of American autoworkers to find employment elsewhere, perhaps in industries that are more labor-intensive and that pay lower wages than were paid by GM and Ford.

Such concerns about imports increasing long-run domestic unemployment, forcing wages generally lower, and impoverishing the nation are standard protectionist fare. Economics shows why such concerns are unwarranted.[6] The only change that international factor mobility adds to familiar accounts is an incidental one. It is that country A obtains its comparative advantage in some capital-intensive industry not by capital actually being built or otherwise originating in country A but, instead, by capital relocating to country A from country B.

If such capital relocation occurs on a sufficiently large scale, workers in country B *might* become generally poorer. But restricting trade will only worsen their plight further. Denying people the opportunity to buy lower-priced or better-quality foreign products is an unlikely means of improving their well-being.

Whether or not international capital mobility impoverishes or enriches workers depends on why capital migrates. Higher taxes, more burdensome regulations, and a long list of other such investment-discouraging policies would reduce the size of America's capital stock and make Americans poorer. If such policies are sufficiently harsh, the resulting exodus of capital (either through migration or

[6]The literature on international trade is enormous. Especially good treatments are Bastiat (1964), Bhagwati (2002), Irwin (1996), Irwin (2002), Lindsey (2002), Norberg (2003), R. Roberts (2001), and Yeager and Tuerck (1966).

depreciation or both) might well be massive. But capital can migrate to other countries for perfectly healthy reasons—for example, if other countries improve their own investment climates. Such healthy migrations are unlikely to diminish the size of America's capital stock.

If some capital migrates from the United States to foreign lands because other countries are adopting more free-market policies, then—assuming the United States does not simultaneously move further away from its own free-market policies—this capital will in all likelihood be replaced by new and more productive capital.

A crucial yet frequently ignored fact is that the size of the capital stock is not fixed. It is largely a positive function of market-oriented policies. The fewer and lighter the burdens that governments place on capital, and the more secure are property rights, freedom of contract, and the rule of law, the greater will be the size of the capital stock. If particular machines or factories move from the United States to Malaysia or Mexico, such capital emigration does not by itself change the institutions, laws, public policies, and enterprising culture that encouraged it to be created in the United States originally. If America's investment climate is not spoiled with impositions such as tax hikes or more burdensome regulations, investors and entrepreneurs will create new capital in the United States.

It is important to understand that the same impetus that Paul Craig Roberts identifies as attracting capital from developed countries to developing countries will be at work in the United States to promote more capital creation here. That impetus is a high and rising marginal productivity of capital. When a piece of capital leaves the United States (say, because its marginal productivity elsewhere has increased), the supply of labor in the United States relative to capital rises—raising the marginal productivity of capital in the United States and, thus, encouraging new investment here.

This new investment will be in industries at which American workers enjoy a (new-found) comparative advantage. These workers' productivity and, hence, their wage rates will be higher in these new industries, working with this new capital, than would have been the case if the older capital were artificially kept in the United States by trade restrictions. American workers will be more productive as a result, as will workers in those countries that received the capital that was formerly in the United States.

## Conclusion

In the end, Paul Craig Roberts's idea seems to be identical to so many other protectionists' fears, including that which impelled Ross

Perot in 1992 to warn about NAFTA creating a "giant sucking sound." The idea is this: free trade encourages a massive outflow of capital from the United States and other western countries to low-wage developing countries. Abandoning free-trade policies might be the only, or best, way of curtailing this capital outflow. If the U.S. government restricts imports, Microsoft, Ford, General Electric, and other high-paying U.S. firms will lose much of their incentive to produce abroad; they'll keep their production facilities and jobs in America.

If the world had only a fixed stock of capital, such a concern would be more plausible than it is in the real world, where the amount of capital is not fixed. Ignoring the fact that America's capital-account surplus is now large and growing (which means that foreigners are investing heavily in the United States), it is indeed possible that too little new investment in the United States will occur to replace capital that emigrates abroad. If so, the problem would not be free trade. The problem would be policy and institutional changes in the United States that reduce the attractiveness of investing in the United States. Restricting free trade in order to cling a bit longer to capital that otherwise would flee and that would not be replaced would be both foolish and futile.

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