Defending the Case for Free Trade

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Several fallacious arguments against free trade were made in the debate on outsourcing that raged during the latest presidential election. In my remarks, I will consider four of them: (i) the conventional case for free trade does not apply to outsourcing; (ii) productivity gains abroad in the goods exported by us undermine the case for free trade; (iii) the free flow of many factors internationally renders the principle of comparative advantage and the associated gains from trade invalid; and (iv) soon all jobs will be outsourced to China and India. In my brief remarks, I endeavor to demonstrate that these arguments do not stand up to closer scrutiny and the conventional case for free trade survives them without so much as a scratch.

Fallacy 1: The conventional case for free trade does not apply to outsourcing.

On this, Gregory Mankiw was correct in asserting that outsourcing is another form of trade. Innovations that lower the transport costs turn some goods that were previously non-traded into traded ones. Innovations that likewise allow massive data to be transported internationally at low costs turn some services that were previously nontraded at arms length into traded ones. Just as the opening to trade of non-traded goods generates the gains from trade, opening to trade of non-traded services brings gains. In my joint article with Jagdish Bhagwati and T. N. Srinivasan (Bhagwati, Panagariya and Srinivasan 2004), I demonstrate this point formally using three different models commonly used by trade economists.

Note that though only outsourcing has received attention in the press, the innovation that makes outsourcing possible also gives rise to in-sourcing from the United States. While moving the call centers and back office activities abroad, the telecommunications revolution has also given rise to the exports of medical, legal, architectural, designing and educational services by the United States. Like outsourcing,

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in-sourcing also generates gains: the former allows us to buy services at prices lower than our production costs and the latter allows us to sell them at prices higher than our production costs.

A <u>caveat</u> to this conclusion arises from the possibility of an adverse secondary effect of outsourcing (or in-sourcing) on the terms of trade in the market for goods that are already traded. For example, cheaper tech support through outsourcing may expand the supply of computers by the U.S. firms and, holding the demand for them constant, lower the prices received abroad for the latter. If the loss due to this induced decline in the price of the U.S. computers is larger than the initial benefit from the purchase of cheaper tech support services, a net loss is possible.

Of course, the terms of trade effect can as easily go the other way. The countries earning export revenues from outsourcing by the United States may increase their spending on the U.S. goods. For example, they may demand more of the U.S. computers and office furniture. This demand-driven effect would pull the U.S terms of trade in the favorable direction.

The terms of trade caveat arises in the case of *every* innovations or policy change that alters a country's demand and supply of traded goods. For example, an innovation by the U.S. firms that lowers their production cost of computers or an efficiency enhancing policy change by the U.S. government that lowers its demand for computers would normally result in an increase in the supply of the U.S. computers in the world markets. Such expansion of exports would lead to a harmful reduction in the price of the U.S. computers. If this decline in the price is sufficiently large, the net effect of the innovation or improved government efficiency may be a decline in the overall U.S. welfare.

While economists have long recognized this possible harmful effect due to the shift in the terms of trade when any policy change or innovation impacts trade flows, the appropriate policy response to it is not a withdrawal from trade. For while these changes may reduce the gains from trade, the latter remain positive. By walking away from those remaining gains, we would make matters only worse.

Fallacy 2: Productivity gains abroad in goods and services exported by us undermine the case for free trade.

This is the argument (wrongly) attributed to Paul Samuelson (2004) in his recent article in the *Journal of Economic Perspectives*. All Samuelson argued was that productivity gains abroad in the goods exported by us would lower the prices of our exports and lower our initial incomes. For example, if the Chinese learn to produce the aircraft they currently import from us, their demand for our aircraft will decline and the price we receive for them in the world market would fall. Trade theorists have, of course, been aware of this possibility since the influential papers by Harry Johnson (1954, 1955) written at a time when fears were being raised that the growth and productivity gains in Europe and Japan might impact the United States adversely.

As Avinash Dixit and Gene Grossman (2004) have pointed out, this possibility does not offer a reason to deviate from the free-trade policy.¹ True, the U.S. incomes decline as a result of the Chinese gain in productivity but its incomes would decline even more were it to respond by closing its borders to trade. The fundamental message of Ricardo's theory of comparative advantage remains valid: given the new Chinese productivity, the United States is still better off trading than not trading with China.

Quite apart from the fact that the adverse terms-of-trade effect does not give one reason to turn to protectionism, the possibility of a loss on this account must itself be questioned. For example, we must ask if China and India were to turn into another Europe or Japan, will it be bad for the United States? There are at least two reasons why the answer is not so clear-cut. First, as these countries grow, they will not just produce more of many goods exported by the United States. They will also demand more of many goods exported by the United States. Second, as the two countries become richer, their trade, like the U.S.-Europe and U.S.-Japan trade, will turn product-differentiation based intra-industry type rather than the factor-endowment-difference based inter-industry type. Such trade is less likely to produce the terms of trade shift and is more likely to generate benefits resulting from increased variety.

Fallacy 3: The Free flow of many factors internationally renders the principle of comparative advantage and the associated gains from trade invalid.

¹ Also see Panagariya (2004) in this context.

Charles Schumer and Paul Craig Roberts (2003) make this argument most forcefully in an influential <u>op-ed</u> in the New York Times. They argue that in the modern world with factor mobility, the principle of comparative advantage put forth by David Ricardo in the early 19th century no longer holds. The resulting trade somehow turns into a zero-sum activity with some countries gaining at the expense of the others. To quote them, "However, when Ricardo said that free trade would produce shared gains for all nations, he assumed that resources used to produce goods--what he called the 'factors of production'--would not be easily moved over international borders. Comparative advantage is undermined if the factors of production ca relocate to wherever they are most productive: in today's case, to a relatively few countries with abundant cheap labor. In this situation, there are no longer shared gains--some countries win and others lose."

I must say that this is a very puzzling argument. Factor mobility had surely existed in the time of David Ricardo. And it became pervasive during the First Globalization extending from 1870 to the First World War and again during the current Second Globalization that began following the Second World War. It is implausible that Ricardo failed to notice international factor mobility around him. It is even more implausible that trade economists since Ricardo have uniformly ignored the implications of factor mobility and gone about business as usual teaching the principle of comparative advantage and the gains from trade, its contradiction by the fact of widespread international factor mobility notwithstanding.

More likely, if Ricardo did not model international factor mobility in his celebrated England-Portugal example of gains from trade, the answer is to be found in the presumption that like all great theorists, he was constructing the simplest example to demonstrate the gains from specialization under trade to all parties involved and to demolish the mercantilist case for protection. In the same vein, while trade economists since Ricardo have formally analyzed the implications of factor mobility in a variety of contexts including the gains from trade, they continue to use the simple England-Portugal example because it continues to be the most powerful tool of demolishing the fallacies arising out of faulty thinking about international trade.

But to answer the Schumer-Roberts criticism explicitly, in Bhagwati, Panagariya and Srinivasan (June 30, 2004), we explain systematically how the Ricardian example

extends to the case when labor is allowed to move internationally. I reproduce that extension in the appendix to this paper. Here let me just note that the free-trade equilibrium is always at least as good as the "no-trade" equilibrium for all parties involved in the presence as well as absence of labor mobility. This conclusion also remains valid when we allow for more than one factor as, for example, in the Hecksher-Ohlin model.

Quite apart from this theoretical analysis, the empirical relevance of the assertion by Schumer and Roberts that all factors today want to move to the location with cheap labor must itself be questioned. In a recent paper, my colleagues Donald Davis and David Weinstein (2002) have offered evidence that is just the opposite of this assertion. According to them, "The US is the destination for a broad range of net factor inflows: unskilled labor, skilled labor, and capital." While I disagree with the manner in which they model migration, they do bring into question the notion that all factors are flowing towards the country with cheap labor today. Moreover, the evidence on gross, as opposed to net, investment flows demonstrates the presence of large volumes of cross investments among the developed countries. The operations of multinationals are concentrated far more within the developed rather than between developed and developing countries.

Fallacy 4: Soon all jobs will be outsourced to China and India.

This is not an argument directly about the gains from trade but it relates to the principle of comparative advantage in a fundamental way. If the contention here is that all or most service jobs will be outsourced to India and China, the statement involves both empirical and theoretical errors. The empirical error is that not all service jobs can be outsourced. About 70 percent of the jobs in the United States are in service industries such as retailing, catering, restaurants and hotels, tourism and personal care that require the consumer and producer to be present in the same place and, therefore, cannot be outsourced (Agrawal and Farrell, 2003). The theoretical error is that the possibility that all jobs, in both manufactures and services, will go to China and India, whether through outsourcing or other trade, because of low labor costs, comes perilously close to confusing absolute and comparative advantage.

One way to see why all jobs cannot shift abroad even if it were physically possible is that we cannot get the Chinese and Indians to work for free for the United States. If we are going to buy their services, we must pay them in some form. The obvious form of payment would be exports and, in that case, the more we import, the more we will have to export. The only alternatives to exports would be that China and India either accept IOUs from the United States in perpetuity or accept IOUs for now and cash them at some time in the future. In the former case, the United States cannot possibly lose since it gets to maintain its high living standard in perpetuity at the expense of China and India. In the latter case, we still continue to reap the gains from trade with trade having the additional inter-temporal dimension.

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Appendix: Factor Mobility and Comparative Advantage

It is also readily shown that the gains from trade do not depend on the absence of factor mobility. We can demonstrate this in the Ricardian model cited by Charles Schumer and Paul Craig Roberts. Thus, consider Table 1, which offers three possible examples assuming the familiar Ricardian structure of two goods (X and Y), two countries (A and B) and one factor of production (labor).

Output per person year						
Country	Example 1		Example 2		Example 3	
	Х	Y	X	Y	X	Y
А	8	4	4	2	4	2
В	2	2	2	4	2	1

Table 1: Comparative Advantage and Factor Mobility

In Example 1, A has an absolute advantage in both goods but comparative advantage in X. Denoting by FT and NT the level of welfare under free trade and no trade (autarky), respectively, we know from the conventional Ricardian theory that $FT \ge NT$ for each country with strict inequality applying to at least one country.² In the trading equilibrium, real wages are higher in A so that allowing labor to move internationally results in the workers migrating from B to A. If only a part of B's labor force is allowed to migrate, the inequality FT \ge NT still holds for the nationals of both countries at the post-migration labor endowments.³ If all labor in B moves to A, the gains-from-trade issue is of course rendered irrelevant.

² The strict equality holds for one country if it is so large that the relative free-trade price settles at its autarky price, which equals its opportunity cost ratio. As long as the free-trade price lies strictly between the opportunity cost ratios of the two countries, we have FT > NT for each country.

³ A different comparison can be done between the welfare levels enjoyed by a country at the free trade equilibriums with and without labor mobility. If the country is small in the goods market so that the terms of trade effects of labor mobility are ruled out, opening to the latter cannot harm the national welfare. If the country is large, however, the ranking between free-trade equilibrium with and without factor mobility compares two sub-optimal equilibriums and can go either way. Our discussion below sheds more light on this question.

In Example 2, A has an absolute advantage in X and B in Y. Consequently, A also has a comparative advantage in X and B in Y so that $FT \ge NT$ continues to apply. In this case, it is possible for trade to equalize real wages, eliminating the incentive to migrate. If the real wages remain different, however, labor mobility will still be partial and the gains from trade will characterize the trade equilibrium under international factor mobility.

In Example 3, A has an absolute advantage in both goods but comparative advantage in none. With the opportunity costs being the same in A and B, there is no scope for trade so that opening to trade is neither beneficial nor harmful: we then have FT = NT. The real wages being higher in A than B, however, labor in B has an incentive to migrate to A. If such migration is permitted, it benefits migrants without hurting the workers in A. But we continue to have FT = NT at the post-migration labor endowments.

The outcomes are not dramatically different in the Heckscher-Ohlin model, which in its conventional version assumes identical technologies across countries and allows for two factors whose relative endowments differ across the two trading nations. As long as the countries do not specialize completely in production, free trade in commodities (free movement of factors) with no movement of factors (commodities), by equalizing commodity (factor) prices, equalizes factor (commodity) prices, thus eliminating the incentive, that exist in autarky, for movements of factors (trade commodities).⁴ By the same token any restrictions on commodity trade (factor movements), by preventing equalization of factor (commodity) prices, could prevent factor (commodity) price equalization, thus leaving positive incentive for factor (commodity) movement as under autarky.

If we allow for complete specialization by one country or for differences in technologies across countries, free trade fails to equalize factor prices. In this case, factors do have an incentive to move internationally even under free trade in goods. But such movement does not eliminate the benefits of trade. With resources having moved to new locations, the trade equilibrium will still be characterized by a superior outcome for the nationals of each country than under autarky, so that $FT \ge NT$.

⁴ This is the celebrated Factor Price Equalization theorem of Paul Samuelson.