The New York Times
The Conscience of a Liberal
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FEBRUARY 21, 2010, 5:02 PM

A Globalization Puzzle

I'm devoting tomorrow's class to the big decline in world trade that took place between the two world wars. It's a familiar proposition to international economists: globalization isn't an inexorable trend. In fact, it took until around 1970 before world goods markets were as closely integrated as they had been in 1913, and it wasn't until very recently that we returned to anything like Edwardian levels of capital-market integration.

Part of what happened between the wars was protectionism, which surged during the Great Depression. But globalization was on the decline even before then, at least in part because of rising real transport costs. And when I try to think about how that could have happened, I find myself puzzled by more recent globalization.

I've been trying various ways to present the key idea; here's one version. Take Ricardo's original comparative-advantage example, in which unit labor requirements look like this:

————Cloth Wine
Britain 100 110
Portugal 90 80

Ricardo famously argued that in this case there can be mutual gains from trade. Suppose, for example, that cloth and wine exchange at a relative price of 1. Then Britain can get its wine more cheaply — 100 units of labor rather than 110 by producing cloth and trading, while Portugal can similarly get its cloth more cheaply by producing wine.

But what happens if we introduce transport costs? Assume, to make this tractable, that each country has to use its own labor to "haul" goods in from the other country. Assume, in particular, that it takes 15 units of British labor to bring in an imported unit of wine, and that it also takes 15 units of Portuguese labor to bring in an imported unit of cloth. In that case, there would be no trade: Britain would need 115 units of labor to acquire wine by making cloth and trading, so self-sufficiency would be better.

Now, obviously technological progress in transportation could change that. Cut transport labor requirements in half — double labor productivity — and trade will spring up.

But what becomes clear once you think about it is that what matters is technological progress in transport *relative to other activities*. Double productivity across the board — cloth and wine as well as transport — and trade remains not worth it. It's not at all obvious, then, that over the long run technological progress should always lead to increased trade as a share of gross world product.

So, how do we make sense of long-run trends in globalization?

I have a story about 1870-1913: it's all about steam. Steam engines were the big technological change of the era, and they were inherently biased toward transportation: steam power had lots of uses, but none so compelling as railroads and ships.

I also, sort of, have a story about the interwar period. That was, arguably, an era in which the big things were electricity and internal combustion. And while both of these mattered a lot for short-haul transportation, they didn't do much for long-range shipping. Meanwhile, electrification of factories was producing big productivity gains, and so perhaps was motorized farm machinery. So technology had an anti-trade bias. (?)

But what do we say about our modern era? I don't think there's anything as simple or cosmic as steam to explain a trend toward rising trade. There have been some big transport innovations — jet aircraft and containerization — but are those enough to explain the seemingly inexorable growth of trade flows? Yes, protectionism has decline a lot too, but again, is that really enough?

Anyway, that's what I'm thinking about when I don't want to think about current affairs.