## ON FREE TRADE AND COMPARATIVE ADVANTAGE:

William Watson (McGill): in The National Post, 30 March 2000

## A difficult idea, in 400 words or less

## Comparative advantage is a hopeful principle, but it's no crowd pleaser

## BY WILLIAM WATSON

John Robson, my friend and former colleague at the Ottawa Citizen, is a brave man. During the almost two years he and I spent together on the Citizen's editorial board, I saw him wade into many a heated exchange, fearlessly defending the most unpopular beliefs.

But on Saturday in the *Post's* Review section, he outdid himself. He presented, and the editor tolerated, an exposition of comparative advantage based on a simple arithmetic example (which, like all arithmetic examples expressed in words, required concentration to follow: I had to concentrate, and I teach the stuff for a living).

John Robson's goal was to make a point both about free trade ("Free trade makes everyone richer," as his piece was called) and about social scientists, most of whom reject "the one single thing any of the social sciences has ever proved beyond rational dispute, mathematically," which is that "voluntary exchange makes both parties better off." In this characterization of comparative advantage he echoes Paul Samuelson, the second recipient of the Nobel Prize in Economics. A mathematician once challenged Prof. Samuelson to name one proposition in the social sciences that was both true and non-trivial. After several years, he finally answered, "comparative advantage."

"That it is logically true," wrote Prof. Samuelson, "need not be argued before a mathematician; that it is not trivial is attested by the 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."

In his impatience with social scientists who reject comparative advantage, Rob-

son will be disappointed to learn that he is echoing Paul Krugman, who recently wrote a paper called "Ricardo's Difficult Idea," which offers several explanations for the widespread lack of appreciation for comparative advantage. (David Ricardo was the 19th-century Englishman who discovered comparative advantage. Prof. Krugman's paper can be read at http://web.mit.edu/krugman/www/ricardo.htm. Robson will be disappointed by Prof. Krugman's concern because, for an American, Prof. Krugman leans left — as does Prof. Samuelson.)

Robson attributes social scientists' rejection of comparative advantage to their generally bolshie nature. Prof. Krugman talks about their aversion to modelling, their penchant for iconoclasm, the many background assumptions that have to be accepted, and a number of other possibilities.

I actually think it's simpler than all that. The problem is that to show how the doctrine works, you have to do algebra, albeit simple algebra. That immediately stops people listening. Which is unfortunate, because the doctrine of comparative advantage is deeply paradoxical, and therefore deeply interesting. Countries should trade with each other, it says, even when one can do everything — everything — more efficiently than the other. People, too. Here, in 400 words, is how I usually try to explain it (though this usually takes the first two lectures of the trade policy course I teach in my day job).

Suppose Japanese are super-productive, as we once thought they were, and Canadians aren't. (Or is that too realistic for you?) Each Japanese can make 100 cars in a year or 50 tons of wheat. Canadians, poor wretches, can only make one car or one ton of wheat.

You'd think Japan would end up making everything, as in the 1980s we sometimes feared they would. In fact, comparative advantage says the Japanese can profit by trading with Canada.

How much will cars cost in Canada? In a year, Canadians can make either one car or one ton of wheat. If labour content determines prices, a ton of wheat will cost one car. In Japan, however, cars are twice as plentiful as wheat. So a ton of wheat should cost two cars, not one.

Where should the Japanese buy their wheat? Where it's cheaper, in Canada. If they take two cars to Canada and trade, they get two tons of wheat. If they insist on producing their own wheat, then every two cars they forgo gets them just one ton of wheat.

Where should the Canadians buy their cars? In Japan, where a ton of wheat gets you two cars, rather than at home, where it buys only one. See the paradox? The Japanese have an "absolute advantage" in both goods: For a given amount ' of labour they can produce more of both than we can. Which means they will be richer than we are. But they can still profit by trading with their productivity inferiors. Fated to be rich, they will be even richer if they trade with us. As for us, our low labour productivity means we will be much poorer than the Japanese, but we will be less poor if we trade with them for our cars rather than struggle against comparative advantage to produce them ourselves.

This is a very hopeful doctrine. Even complete nincompoops can improve their lot by trading — even if nincompoops will always be worse off than polymaths. The key is to specialize in what you do least badly. What makes it all work is that the rate at which the two countries can transform cars into wheat (and vice-versa) differs. If it doesn't — if the average Japanese can produce 100 cars and 100 bushels of wheat in a year — then cars and wheat will cost the same in both countries and there's no advantage to trade.

The model — that was a simple economic model — can be (and has been) made a lot more complicated and/or realistic. But that's its kernel.

All credit to John Robson for putting it in the newspapers. I hope circulation doesn't plummet as a result.

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