

THE IOWA CAR CROP

A thing of beauty is a joy forever, and nothing is more beautiful than a succinct and flawless argument. A few lines of reasoning can change the way we see the world.

I found one of the most beautiful arguments I know while I was browsing through a textbook written by my friend David Friedman. While the argument might not be original, David's version is so clear, so concise, so incontrovertible, and so delightfully surprising, that I have been unable to resist sharing it with students, relatives, and cocktail party acquaintances at every opportunity. The argument concerns international trade, but its appeal is less in its subject matter than in its irresistible force.

David's observation is that there are two technologies for producing automobiles in America. One is to manufacture them in Detroit, and the other is to grow them in Iowa. Everybody knows about the first technology; let me tell you about the second. First you plant seeds, which are the raw material from which automobiles are constructed. You wait a few months until wheat appears. Then you harvest the wheat, load it onto ships, and sail the ships eastward into the Pacific Ocean. After a few months, the ships reappear with Toyotas on them.

International trade is nothing but a form of technology. The fact that there is a place called Japan, with people and factories, is quite irrelevant to Americans' well-being. To analyze trade policies, we might as well assume that Japan is a giant machine with mysterious inner workings that convert wheat into cars.

Any policy designed to favor the first American technology over the second is a policy designed to favor American auto producers in Detroit over American auto producers in Iowa. A tax or a ban on "imported" automobiles is a tax or a ban on *Iowa-grown* automobiles. If you protect Detroit carmakers from competition, then you must damage Iowa farmers, because Iowa farmers *are* the competition.

The task of producing a given fleet of cars can be allocated between Detroit and Iowa in a variety of ways. A competitive price system selects that allocation that minimizes the total production cost.* It would be unnecessarily expensive to manufacture all cars in Detroit, unnecessarily expensive to grow all cars in Iowa, and unnecessarily expensive to use the two production processes in anything other than the natural ratio that emerges as a result of competition.

That means that protection for Detroit does more than just transfer income from farmers to autoworkers. It also raises the total cost of providing Americans with a given number of automobiles. The efficiency loss comes with no offsetting gain; it impoverishes the nation as a whole.

There is much talk about improving the efficiency of American car manufacturing. When you have two ways to make a car, the road to efficiency is to use both in optimal proportions. The last thing you should want to do is to artificially hobble one of your production technologies. It is sheer superstition to think that an Iowa-grown Camry is any less "American" than a Detroit-built Taurus. Policies rooted in superstition do not frequently bear efficient fruit.

In 1817, David Ricardo—the first economist to think with the precision, though not the language, of pure mathematics—laid the foundation for all future thought about international trade. In the intervening 150 years his theory has been much elaborated but its foundations remain as firmly established as anything in economics. Trade theory predicts first that *if you protect American producers in one industry from foreign competition, then you must damage American producers in other industries*. It predicts second that *if you protect American producers in one industry from foreign competition, there must be a net loss in economic efficiency*. Ordinarily, textbooks establish these propositions through graphs, equations, and intricate reasoning. The little story that I learned from David Friedman makes the same propositions blindingly obvious with a single compelling metaphor. That is economics at its best.

*This assertion is true, but not obvious. Individual producers care about their individual profits, not about economywide costs. It is something of a miracle that individual selfish decisions must lead to a collectively efficient outcome. In my chapter on Why Prices Are Good, I have indicated how economists know that this miracle occurs. In the present chapter I will pursue its consequences.