

MAKING SENSE OF THE COMPETITIVENESS DEBATE

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I. INTRODUCTION

Most of us, despite all the evidence, cling to a vision of public discourse in which great issues are decided by profound debates among deep thinkers. We like to imagine that the authors we read in intellectual magazines, the talking heads we see on television, are really engaged in such debates—that while they may have differences of opinion, they start from a shared base of knowledge and understanding.

When it comes to international economics, however, nothing could be further from the truth. Debates about international trade are a study in confusion and misconceptions, in which the ‘experts’ you see, hear, and read are usually misinformed about the most basic facts and concepts—and in which even those who are fairly sound on the economics do not understand the nature of the debate.

The discussion of competitiveness is a case in point. The idea that the economic success of a country

depends on its international competitiveness took hold among business, political, and intellectual leaders in the late 1970s. The World Economic Forum, which hosts the famous Davos conferences, began issuing its annual World Competitiveness Report in 1980, and the rankings in that report soon became a major criterion by which national performance was judged. By the 1990s the concept of competitiveness was no longer even controversial among influential people. Of course competitiveness was the key; the only question was how to achieve it.

But what does national economic competitiveness mean? For the great majority of those who use the term, it means exactly what it seems to mean: it is the view that nations compete for world markets in the same way that corporations do, that a nation which fails to match other nations in productivity or technology will face the same kind of crisis as a company that cannot match the costs or products of its rivals. This is the view expressed, for example, in Lester Thurow’s 1992 book, *Head to Head*, which repeat-

edly asserts that advanced nations are in a ‘win-lose’ competition for world markets. (Thurow’s book not only was a massive best-seller but was approvingly cited by no less a figure than President Clinton.) It is also the view expressed in the European Commission’s 1993 White Paper, *Growth, Competitiveness, Employment*, whose introduction argued that competition from newly industrializing economies was the most important reason for the upward trend in European unemployment rates.

While influential people have used the word ‘competitiveness’ to mean that countries compete just like companies, professional economists know very well that this is a poor metaphor. In fact, it is a view of the world so much in conflict with what even the most basic international trade theory tells us that economists have by and large simply failed to comprehend that this is what the seemingly sophisticated people who talk about competitiveness have in mind. To the extent that they even notice that most people who matter think that competitiveness is what economics is all about, economists imagine that the word must mean something other than what it seems to mean. Either they suppose that ‘competitiveness’ is a poetic way of saying productivity, and has nothing to do with any actual conflict between countries; or they suppose that people who talk about competitiveness must understand the basics and have in mind some sophisticated departure from standard economic models, involving imperfect competition, external economies, or both.

And the flip side of this misunderstanding is that those relatively few believers in the importance of competitiveness who do know that their view conflicts with simple trade theory are unintentionally given aid and comfort by economists who seem to be telling them that they have not failed to understand the simple economics, but rather have transcended it.

In this article I want to offer a sort of guide to the realities of this discussion—in particular, to the widely different levels of understanding among people who have managed to convince themselves and others that they know something about international trade. Only if you understand that the people you hear or read are operating at very different

intellectual levels—that there is no shared basis of mutually agreed facts and mutually understood concepts—can you make sense of what is otherwise a baffling discussion.

II. FOUR CHARACTERS

To introduce the subject, let me describe four stock characters. All of them imagine themselves to be sophisticated about international economics, but in fact their grasp of the subject varies enormously. In order of increasing sophistication, they are:

- the Mercantilist
- the Classicist
- the Strategist
- the Realist

(i) The Mercantilist

The Mercantilist is someone who has no problems at all with the term ‘competitiveness’. To him, it seems obvious that countries compete with each other in the same way that corporations do. He has never heard of comparative advantage or, if he has, he thinks it means the same thing as ‘competitive advantage’. He believes that the purpose of trade is to generate exports, which create jobs; if he has any sympathy for free trade, it is because we can make a deal to accept other countries’ exports if they accept ours.

The important thing to understand about the subject of competitiveness is that the vast majority of people who use the term—politicians, business leaders, journalists, best-selling authors on economics—are Mercantilists. Anyone who writes about trade as a global struggle or war; anyone who compares countries to corporations; anyone who says that trade policy is about creating jobs; anyone who talks about ‘high-value’ sectors; all of these people reveal themselves to be Mercantilists. A few of them may try to put an intellectual gloss on their views by citing the works of Strategists, but a Mercantilist uses Strategic ideas as a drunk uses a lamppost—as a source of support, not of illumination.

Mercantilists need not be protectionists. Indeed, the relatively liberal trading system we actually have

was achieved not via an understanding of the economist's case for free trade, but via the application of a doctrine of enlightened mercantilism, in which countries are willing to lower their trade barriers—to offer 'concessions'—only in return for access to other countries' markets. Both NAFTA and the Uruguay Round were sold politically not on the basis of economists' estimates of the gains from trade, but with the claim that the extra exports thereby generated would add hundreds of thousands of jobs. None the less, even the enlightened Mercantilist's attachment to free trade is very much conditional—he or she is for 'free and fair' trade, not free trade pure and simple.

(ii) The Classicist

Economists, of course, do not think about international trade in anything like that way. The classical model of trade is essentially that initially stated by Ricardo and formally nailed down by John Stuart Mill, and still remains the main subject of international economics as it is taught in universities. The difference in outlook between a Classicist and a Mercantilist is enormous—much greater than either the Classicist or the Mercantilist is likely to realize. Consider the following statement of the classical position.

The purpose of trade is imports, not exports. Exports are a cost—something we must produce because our import suppliers are crass enough to demand payment. Or to put it differently, an export is an indirect way to produce an import, which is worth doing because it is more efficient than producing our imports for ourselves.

This is standard economics—indeed, Mill put it almost exactly that way. Yet it is almost the opposite of what Mercantilists believe.

(iii) The Strategist

The Strategist's objection to the classical position can be summarized with two words: Silicon Valley. In the basic classical model, competition is perfect—that is, there are no monopolies or oligopolies; wages are equalized across industries; and national efficiency in any given industry is a datum, determined by factors outside the economist's brief. In

reality, there are industries in which economies of scale imply that only a few, perhaps highly profitable firms dominate the market; there are industries that seem persistently to pay higher wages than others, even when the qualifications of the workers are taken into account; and there are industries in which technological prowess seems to be generated by the mutual spill-overs of knowledge from national producers, and in which exports, therefore, may create comparative advantage rather than the other way around.

These failures of the classical model were the dominant subject of theoretical and empirical research on international trade during the 1980s. The Strategist, however, is not a mere researcher; he or she is eager to go out and exploit the possibilities for activist government that these market imperfections may create. Strategists want the government to stand behind domestic firms wherever there seems to be a winner-takes-all competition for future monopoly profits; they want active promotion of industries that seem to pay exceptionally high wages, or that seem likely to generate strong spill-overs.

Although the Strategist draws on the work of the economic theorists who, during the 1980s, put together what came to be known as the 'new trade theory', surprisingly few of the new trade theorists themselves are Strategists. Instead, however excited they may have been about the intellectual contribution of the new trade theory, they have become increasingly sceptical about the extent to which this theory can justify government activism in practice. In short, most of the new trade theorists are Realists.

(iv) The Realist

The Realist is someone who understands both why the classical analysis of international trade refutes crude mercantilist views, and how the qualifications to classical trade theory create new, more subtle arguments for intervention. What distinguishes the Realist from the Strategist are two beliefs. First, the Realist has looked at the practical prospects for strategic trade policy, and found them unimpressive: while markets are indeed imperfect, the potential gains from trying to exploit those imperfections are,

he believes, essentially small change. Second, the Realist is cynical about the likelihood that subtle arguments for intervention can be translated into productive policies in the real world. In particular, he suspects that Strategists who think that they can improve on the policy recommendations of Classicists will, in practice, simply provide a bit of intellectual cover for the crudely belligerent ideas of Mercantilists. As a result, the Realist ends up sounding quite a lot like the Classicist: he knows that the classical model is not the whole story, but it is a lot of the story, and he believes that most of those who criticize conventional views of trade do so not because they have transcended the classical model but because they have never understood it in the first place.

Obviously, I myself am a Realist—the paragraph above about why the major new trade theorists are not Strategists was a self-portrait. But rather than go straight into a defence of the Realist position, let me work my way there in stages.

My plan here is to illustrate the basis for these different positions by considering the transitions between them. That is, we will see how classical trade theory refutes mercantilism; how new trade theory offers the possibility of strategic trade policy; and, finally, why a realistic appreciation of both the economics and the politics of trade leads one back to something more like a classical than a strategic view of the issue.

III. FROM MERCANTILISM TO CLASSICISM

It cannot be emphasized too much that the vast majority of those who talk about national economic competitiveness—politicians, trade officials, editors of leading magazines, and professors of political science (and an occasional rogue economist)—are Mercantilists. Perhaps some of the readers of this article are Mercantilists, too. To test whether you are, consider the following rough reproduction of a discussion I had with an individual who routinely makes the lists of America's top ten intellectuals.

He said: 'Isn't the story of the automobile industry basically what is happening to the whole economy?

Foreigners started to produce cars better and cheaper than ours, and as a result we lost hundreds of thousands of jobs.' I replied: 'You can't use that kind of story about what happens in an individual industry to make sense of what is happening to the economy as a whole. If foreigners become relatively more productive in a particular industry, then of course we will lose jobs in that industry. But that doesn't mean that we lose jobs in the economy as a whole, or that foreign productivity growth hurts us.' 'Why do you keep on talking about "a particular industry"?' 'Isn't the economy just the sum of what happens in each industry? Haven't autos gone the way of textiles, and won't computers be next?' 'No, of course not—that's the whole point of the idea of comparative advantage. You always have a comparative advantage in something.' 'Well, that's not what Lester Thurow says.'

If you side with the other speaker—if you can't follow or don't accept what I was trying to say—then you are a Mercantilist. Conversely, if you think that everyone who talks knowingly about international trade must, at the very least, understand the basic idea of comparative advantage, you are naïvely mistaken. In fact, almost nobody does.

When someone who does understand comparative advantage spends any length of time discussing and debating international trade with the great majority of would-be sophisticates who do not, one of two things happens. Either he goes native, and forgets what he used to know; or he develops a new, almost awed respect for the sophistication of the simplest trade models. In particular, the basic two-good, one-factor model of international trade that Ricardo sketched out and John Stuart Mill filled in begins to seem stunningly insightful. If you read the reports of the innumerable commissions and conferences on competitiveness, the articles published on the subject in learned magazines and upscale newspapers, you will again and again see propositions such as the following:

- the growth of new economies in Asia necessarily comes at the expense of the West;
- if our foreign rivals become more productive than we are across the board, we will have nothing that we can produce competitively, and our standard of living will collapse;

- as modern technology diffuses globally, the real incomes of advanced nations will be driven down towards Third World levels;
- intensified competition between nations will lead to a simultaneous decline in everyone's incomes.

I have often wondered why it is so hard to explain that propositions like these are silly. The answer, I now believe, is that international trade is a quintessentially 'general equilibrium' subject. By this I do not mean that trade must be addressed in terms of an analysis that assumes that markets are perfectly competitive, or even that they are in equilibrium. I refer rather to what somebody once described as the essential insight of general equilibrium analysis: 'Everything in the economy affects everything else in at least two ways.' Well, not quite; but it is utterly crucial when discussing international trade to keep track of the interdependencies among the variables of interest, and not to hold constant things that will not stay constant. For example, the amateur pundit on international trade typically thinks of wages as a given, and so imagines that productivity growth in low-wage countries must always come at the expense of jobs elsewhere; or he thinks implicitly in terms of a world market of fixed size, in which one country's increased output can only come by crowding out production and jobs in other countries. But if one understands even the simplest textbook model of comparative advantage, one already has a picture of a world in which wages, prices, the pattern of specialization and production, and the size of the world market are all simultaneously and mutually determined; in which productivity growth will feed back to wages, in which output growth will feed back to demand.

How can such a simple model offer a world-view that is much more subtle and complex than that held by the vast majority of even highly intelligent commentators, no matter how many facts they know? The answer, I suspect, is that general equilibrium is a very difficult thing to understand unless you are willing and able to think about it mathematically. We are not talking about the kind of maths that physicists use—the Ricardo–Mill model requires no more than high school algebra, and can even be explained with numerical examples. But seven generations of economists, some of them very good writers and teachers,

can attest that the insights one gets from Ricardo and Mill cannot be explained unless the listener is willing to accept the idea that a simplified mathematical model can shed light on the way the world economy works, and to spend a little while understanding the mechanics of that model.

Otherwise, even in a two-good, two-country, one-factor model there is too much going on to keep everything straight.

The prevalence of Mercantilists is thus easy to understand. Most people dislike maths in general, and particularly hate the idea of doing anything that seems like going back to school.

One may therefore argue that the success of the doctrine of competitiveness owes much to the excuse it gives would-be experts on world trade for *not* going back to school. The rhetoric of competitiveness has, in effect, made the Mercantilist position seem not only respectable but sophisticated. Like the famed intellectual I was talking to, if an instinctive Mercantilist should be confronted with some puzzling economist's remark about something called 'comparative advantage', some suggestion that the economy is more than the sum of its parts, he need only reply 'Well, that's not what Lester Thurow says.'

IV. FROM CLASSICAL TO STRATEGIC TRADE

Once one has tried to talk seriously about trade with people who do not understand comparative advantage, one appreciates anew the astonishing beauty and sophistication of classical trade theory. None the less, there is more to life and even to international trade than comparative advantage; and since about 1980 much of the empirical and analytical effort of international economists has been devoted to departures from the classical approach.

The new trade theory has been the subject of many manifestos and surveys. Rather than try to restate what it was all about, let me simply quote myself, from the introduction to my own 1990 book, *Rethinking International Trade*:

If one had to provide a concrete example of what the new trade theory is about, it might be this: conventional trade theory views world trade as taking place entirely in goods like wheat; new trade theory sees it as being largely in goods like aircraft. Since a good part of world trade is in goods like wheat, and since even trade in aircraft is subject to some of the same influences that bear on trade in wheat, traditional theory has by no means been disposed of completely. Yet the new theory introduces a whole set of new possibilities and concerns.

Begin with the most basic question: Why is there international trade? The traditional theory answers: Because countries are different. Canada exports wheat to Japan because Canada has so much more arable land *per capita*, and as a result in the absence of trade wheat would be much cheaper in Canada. The differences between countries that drive trade may lie in resources, technology, or even in tastes, but in any case, traditional theory takes it as axiomatic that countries trade in order to take advantage of their differences.

The new theory acknowledges that differences between countries are one reason for trade, but it adds another: Countries may trade because there are inherent advantages to specialization. The economies of scale in aircraft manufacture are so large that the world market can accommodate at best only a few efficient-scale producers and thus only a few centres of production. Even if Japan and the United States were identical, it is likely that only one country would be producing (say) wide-bodied jet aircraft, and as a result there must be trade in order to allow the centres of production to serve the world market. Of course, the United States and Japan are not identical, but the new theory says that much trade, especially between similar countries, represents specialization to take advantage of increasing returns rather than to capitalize on inherent differences between the countries.

What determines the international pattern of specialization? In traditional theory the answer emerges from the explanation of trade itself: Countries produce goods that would have been relatively cheap in the absence of trade. Comparative advantage may arise from a variety of sources, but in any case the attributes of a country determine what it produces.

In the new theory an important element of arbitrariness is added to this story. Why are aircraft manufactured in Seattle? It is hard to argue that there is some unique attribute of the city's location that fully explains this. The point is, instead, that the logic of increasing returns

mandates that aircraft production be concentrated somewhere, and Seattle just happens to be where the roulette wheel came to a stop. In many of the new models of trade, the actual location of production is to some degree indeterminate. Yet what the example of Seattle suggests, and what is explicit in some of the models, is a crucial role for history: Because Seattle (or Detroit or Silicon Valley) was where an industry initially got established, increasing returns keep the industry there.

What are the effects of protection? In traditional trade models a tariff or import quota raises the price of a good for both domestic producers and domestic consumers, reduces imports, and generally, except in some well-understood cases, is a bad thing. In new trade theory the result could be either much worse or much better. Let all countries protect domestic aircraft industries, and the result will be a fragmented world market in which losses arise not only from failure to specialize in accord with comparative advantage but also from inefficient scale production. On the other hand, an individual country that protects its aircraft industry might conceivably increase the scale of that industry sufficiently to reap a net benefit, possibly even lower prices to domestic consumers.

Finally, what is the optimal trade policy? Traditional theory is the usual basis for advocating free trade, one of the most strongly held positions in the economics profession (although actually even in traditional theory a second-best case can be made for protection as a corrective for domestic market failures). The new trade theory suggests a more complex view. The potential gains from trade are even larger in a world of increasing returns, and thus, in a way, the case for free trade is all the stronger. On the other hand, the aircraft example clearly suggests that an individual country acting alone may have reasons not to adopt free trade. New trade models show that it is possible (not certain) that such tools as export subsidies, temporary tariffs, and so on, may shift world specialization in a way favourable to the protecting nation. (Krugman, 1990, pp. 1–3)

This certainly sounds as if the new trade theory not only represents a major change from classical views, but offers considerable scope for government intervention. And many people, ranging from Clyde Prestowitz (1992) to Laura D'Andrea Tyson (1992), have in fact taken this theory as a green light to advocate more or less aggressive, neo-mercantilist policies. So why are none of the people who created the new trade theory Strategists? What is the objection?

V. FROM STRATEGIC TRADE POLICY TO CYNICAL REALISM

A Realist appreciates the sophistication of classical trade theory, but also acknowledges its incompleteness; he is willing to take seriously the ideas of the new trade theorists (especially if he is one of them himself), and to examine the possibilities for productive departures from free trade. None the less, he does not share the interventionist propensities of the Strategist, because he regards acting on the theoretical possibilities for activism to be virtually certain to do more harm than good.

This judgement is essentially empirical rather than theoretical. It rests on three main observations.

First, while it may seem easy in theoretical models to state the conditions for a strategic trade policy, it is extremely hard to translate those conditions into practical advice for real industries. The reason is that while all perfectly competitive industries are pretty much alike, each imperfectly competitive industry is imperfect in its own way. It may not be hard to sound sophisticated about an industry such as aircraft; but if you are asked, say, to provide a quantitative assessment of the likely effects of an export subsidy, you quickly realize that there is a big difference between knowing a lot of facts and really knowing how a market works. And worse yet, if you should happen really to figure out aircraft, you will find that very little of that knowledge generalizes to computers, which are in turn utterly different from telecommunications, which do not at all resemble software . . .

The difficulty of converting the theoretical possibility of strategic trade policy into practical policy recommendations is well illustrated by the slightly comical story of punditry on the semiconductor industry.

During the 1980s the manufacture of chips took on a sort of iconic status, both as the supposedly canonical example of high-technology industry (although it is very different from other high-tech sectors) and as a supposed demonstration of the superiority of Japanese industrial policy over American *laissez-faire*. Indeed, even in the early 1990s James Fallows (1994) used the example of silicon

chips to argue for the bankruptcy of conventional economic analysis. And semiconductors is definitely an industry that departs in important ways from the classical assumptions: there are strong economies of scale, both at the level of the individual producer and, if real estate prices in Silicon Valley are any indication, at the level of the industry.

But to formulate a useful policy, one must have more than a general sense of the existence of market imperfections: one must be much more specific. Circa 1989, the conventional wisdom on semiconductors was based on two propositions: (i) the key to the industry—its ‘technology driver’—was the manufacture of DRAMs (dynamic random access memories), a standardized product with much larger sales volume than more differentiated chips; and (ii) the market for DRAMs was a steadily narrowing circle—only some of those who had produced 16K DRAMs made it into the market for 64Ks, only some of those into the market for 256Ks, and so on.

The conclusion, then, was that Japan’s apparent domination of the market for DRAMs would eventually give a few Japanese firms both a monopoly position in that market and technological dominance of the industry as a whole.

But it has not turned out that way at all. America’s semiconductor companies have retained and even increased their technological edge in sophisticated special-purpose chips, despite losing the mass-produced memory market to Japan—so it turns out that the presumed spill-over between DRAMs and other chips was illusory, or anyway much weaker than imagined. And DRAMs themselves have turned out not to be the narrowing circle everyone had expected: the Japanese producers have faced new competition, mainly from developing Asian nations but also from re-entering US producers. In short, the conventional wisdom on the nature of the market imperfections in semiconductors appears, at this point, to have been almost completely wrong. And the semiconductor industry is, as modellers of industrial policy can attest, a comparatively easy market to study: its technology and product are relatively well-defined, as compared with such amorphous and complex industries as telecommunications.

The example of semiconductors shows, then, that it is extremely hard to gain enough understanding of an imperfectly competitive industry to formulate an effective strategic policy. But modellers of such industries have also learned something else: even if you think you do understand an industry well enough to devise an activist policy, or are willing for the sake of argument to assume that your model is really good enough, estimates of the gains from strategic trade policies almost always turn out to be very small.

This is not an easy point to explain without going through the details of the extensive modelling efforts in this area; interested readers might want to look at Krugman and Smith (1994) for a sampling of articles. However, the main point may be conveyed by considering a hypothetical scenario. US officials have argued that a true opening of the Japanese market might lead to \$20 billion annually in additional US exports, many of them high-technology products; and they have argued that such exports are desirable because these are high-wage sectors. Well, all of this can be quantified. Value-added per worker in high-technology industries is about \$80,000; thus \$20 billion would mean 250,000 such jobs. The wage premium in high-tech has been estimated by Tyson (1992) at 15 per cent, or about \$6,000 per worker. So under favourable assumptions the net gains in wages to the USA if Japan were to give it everything it wanted would be \$6,000 times 250,000 or \$1.5 billion. That may sound like a lot—but it is only one-fortieth of 1 per cent of America's GDP. And this is a wildly optimistic scenario; no real strategic trade policy is likely to be anywhere close to this effective. The fact is that nobody who has studied strategic trade policy quantitatively has been able to make it appear to be more than a very marginal issue for overall economic success.

Given this economic background—it is very difficult to formulate strategic trade policies, and the evidence we have suggests that, even if you could, it would not be worth much to the economy—one then arrives at the final reason why new trade theorists are generally Realists rather than Strategists: policy-makers are very unlikely to understand any of this. Again, it cannot be emphasized too much that almost everyone who matters is a Mercantilist. I have myself tried to make the numerical argument above to business leaders and pundits who regard them-

selves as well-informed about international trade. They invariably object to the idea that only the wage premium represents a net gain, wanting to count all of the people employed in producing goods for the Japanese market as a net addition to employment, and indeed wanting to invoke multiplier effects as well. In short, they do not understand even the most basic adding-up constraints.

What this means is that the Strategist who goes to politicians with clever ideas for strategic trade policies is kidding himself. He may imagine that they value the content of his ideas. In fact, they value him because what he says seems to confirm to them their Mercantilist views, and absolves them from the need to understand even classical, let alone 'new', trade theory. Or, to put it more broadly, Mercantilists value Strategists not because they want to be sophisticated, but because they want to feel sophisticated, without actually having to give up their crude but satisfying views. The Realist understands this, and thus ends up sounding very much like a Classicist in denouncing Mercantilists.

VI. THE IDEA OF COMPETITIVENESS

Economists, in general, do not use the word 'competitiveness'. Not one of the textbooks in international economics I have on my shelves contains the word in its index. So why are there so many councils on competitiveness, White Papers on competitiveness, and so on? Why have most people who think about international trade come to use 'competitiveness' as perhaps the central concept of their worldview? Why, indeed, does this journal have a whole issue devoted to the subject?

As I said at the beginning of this piece, most of us would like to believe that great public debates are driven by serious intellectual concerns. We would therefore like to believe that if famed intellectuals and powerful politicians talk about 'competitiveness', they must have something meaningful in mind. It seems far too cynical to suggest that the debate over competitiveness is simply a matter of time-honoured fallacies about international trade being dressed up in new and pretentious rhetoric.

But it is.

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