Proving My Point

Paul Krugman

My article in the March/April issue of *Foreign Affairs* has obviously upset many people. Some of my critics claim that I misrepresented their position, that despite their insistent use of the word "competitiveness" they have never believed that the major industrial nations are engaged in a competitive economic struggle. Others claim that I have gotten the economics wrong: that countries *are* engaged in a competitive struggle. Indeed, some of them make both claims in the same response.

MOVING TARGET

Lester C. Thurow vigorously denies ever asserting that international competition is a central issue for the U.S. economy. In particular, he cites page counts from his 1985 book, *The Zero-Sum Solution*, to demonstrate that domestic factors are his principal concern. But Thurow's most recent book is *Head to Head*, which follows its provocative title with the subtitle, *The Coming Battle Among Japan, Europe and America*. The book jacket asserts that the "decisive war of the century has begun." The text asserts over and over that the major economic powers are now engaged in "win-lose" competition for world markets, a competition that has taken the place of the military competition between East and West. Thurow now says that international strategic competition is no more than seven percent of the problem; did the typical reader of *Head to Head* get this message?

Similarly, Stephen S. Cohen denies that he, or indeed anyone else with whom I should "deign to take difference," has ever said the things I claim competitiveness advocates believe. But in 1987 Cohen, together with John Zysman, published *Manufacturing Matters*, a book that seemed to say two (untrue) things: the long-term downward trend in the share of manufacturing in U.S. employment is largely due to foreign competition, and this declining share is a major economic problem.

After their initial denial, both Cohen and Thurow proceed to argue that international competition is of crucial importance after all. In this they are joined by

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Clyde V. Prestowitz, Jr., who at least makes no bones about believing that trade and trade policy are the central issue for the U.S. economy. Does Cohen believe that Prestowitz—or James Fallows, who expressed similar views in his new book, *Looking at the Sun*—is one of those people with whom I should not deign to argue?

SLOPPY MATH: PART II

Of all the elements in my article, the section on careless arithmetic—the strange pattern of errors in reporting or using data in articles and books on competitiveness—has enraged the most people. Both Thurow and Prestowitz have taken care to fill their responses with a blizzard of numbers and calculations. However, some of the numbers are puzzling.

For example, Thurow says that imports are 14 percent of U.S. GDP, while exports are only 10 percent, and that reducing imports to equal exports would add $250 billion to the sales of U.S. manufacturers. But according to *Economic Indicators,* the monthly statistical publication of the Joint Economic Committee, U.S. imports in 1993 were only 11.4 percent of GDP, while exports were 10.4 percent. Even the current account deficit, a broader measure that includes some additional debit items, was only $109 billion. If the United States were to cut imports by $250 billion, far from merely balancing its trade as Thurow asserts, the United States would run a current account *surplus* of $140 billion—that is, more than the 2 percent maximum of GDP U.S. negotiators have demanded Japan set as a target!

Or consider Prestowitz, who derides my claim that high-technology industries, commonly described as "high value" sectors, actually have much lower value added per worker than traditional "high volume," heavy industrial sectors. I have aggregated too much by looking at broad sectors like electronics, he says; I should look at the highest-tech lines of business, like semiconductors, where value added per worker is $234,000. Prestowitz should report the results of his research to the Department of Commerce, whose staff has obviously incorrectly calculated (in the *Annual Survey of Manufactures*) that in 1989 value added per worker in Standard Industrial Classification 3674 (semiconductors and related devices) was $96,487—closer to the $76,709 per worker in SIC 2096 (potato chips and related snacks) than to the $187,569 in SIC 3711 (motor vehicles and car bodies).[1]

Everyone makes mistakes, although it is surprising when men who are supposed to be experts on international competition do not have even a rough idea of the size of the U.S. trade deficit or know how to look up a standard industrial statistic. The interesting point, however, is that the mistakes made by Thurow, Prestowitz and other competitiveness advocates are not random errors; they are always biased in the same direction. That is, the advocates always err in a direction that makes

[1] I don't know why Thurow thinks the U.S. trade deficit is four times as big as it actually is. I have, however, tracked down Prestowitz's number. It is not value added per employee; it is shipments (which are always larger than value added) divided by the number of production workers (who are only a fraction of total employment, especially in high-technology industries).

international competition seem more important than it really is.

Beyond these petty, if revealing, errors of fact are a series of conceptual misunderstandings. For example, Prestowitz argues that productivity in sectors that compete on world markets is much more important than productivity in non-traded service sectors because the former determine wage rates throughout the economy. For example, because U.S. manufacturing workers are much more productive than their Third World counterparts, U.S. barbers, who do not have a comparable productivity advantage, also get high wages. But Prestowitz fails to notice that the converse is also true: service productivity affects the real wages of manufacturing workers. Because the high relative productivity of U.S. manufacturing is not matched in the haircut sector, haircuts by those well-paid barbers are much more expensive than haircuts in the Third World; as a result real wages of U.S. manufacturing workers (that is, wages in terms of what they can buy, including haircuts) are not as high as they would be if U.S. barbers were more productive. With careful thought, one realizes that real wages depend on the overall productivity of the economy, with no special presumption that productivity in manufacturing—or in internationally traded sectors in general—deserves any more attention or active promotion than productivity elsewhere.

THE BETTMANN ARCHIVE

Friedrich List, the new cult figure

Cohen makes essentially the same mistake when he complains that I underestimated the effects of competitive pressure because I focused only on import and export prices and did not consider the further impacts of that pressure on profits and wages. He somehow fails to realize that a change in wages or profits that is not reflected in import or export prices cannot change overall U.S. real income—it can only redistribute profits to one group within the United States at the expense of another. That is why the effect of international price competition on U.S. real income can be measured by the change in the ratio of export to import prices—full stop. And the effects of changes in this ratio on the U.S. economy have, as I showed in my article, been small.

Or consider Thurow's analysis of the benefits that would accrue to the United States if it could roll back imports (leaving aside the inaccuracy of his numbers). He asserts that the United States could create five million new jobs in import-competing sectors, and he assumes that all five million jobs represent a net addi-

tion to employment. But this assumption is unrealistic. As this reply was being written, the Federal Reserve was raising interest rates in an effort to rein in a recovery that it feared would proceed too far, that is, lead to excessive employment, producing a renewed surge in inflation. Some people think that the Fed is tightening too soon, but the essential point is that the growth of employment is not determined by the ability of the United States to sell goods on world markets or to compete with imports, but by the Fed's judgement of what will not set off inflation. So suppose that the United States were to impose import quotas, adding millions of jobs in import-competing sectors. The Fed would respond by raising interest rates to prevent an overheated economy, and most if not all of the job gains would be matched by job losses elsewhere.

THINGS ADD UP

In each of these cases, my critics seem to have forgotten the most basic principle of economics: things add up. Higher employment in import-competing industries must come either through a reduction in unemployment, in which case one must ask whether the implied unemployment rate (about three percent in Thurow's example) is feasible, or at the expense of jobs elsewhere in the economy, in which case no overall job gain takes place. If higher manufacturing wages lead to a higher wage rate for barbers without higher tonsorial productivity, the gain must come at someone else's expense. Since it is hard to see how foreigners pay for more expensive American haircuts, that wage gain can only redistribute the benefits of manufacturing productivity from one set of American workers to another, not increase the total gains. In their haste to assign great importance to international competition, my critics, like the inventors of perpetual motion machines, have failed to realize that there are conservation principles that any story about the economy must honor.

But perhaps Cohen, Thurow and Prestowitz stumble on economic basics because they are so eager to get to their main point, which is that advanced economic theory, and in particular the theory of strategic trade policy, supports their obsession with competitiveness.

Prestowitz's central assertion is that the theory of strategic trade policy, which he for some reason thinks I invented in a paper about aircraft competition (the actual inventors were James Brander and Barbara Spencer, who never mentioned aircraft), justifies aggressively interventionist trade policies. He further asserts that economists in general, and I in particular, have run away from that implication for ideological reasons.

Well, that's not quite the real story. It is true that in the early 1980s professional economists became aware that one of the implications of new theories of international trade was a possible role for strategic policies to promote exports in certain industries. Confronted with a new idea that was exciting, potentially important but untested, these economists began a sustained process of research, probing the weak points, confronting the new idea with the data. After all, lots of things could be true in principle. For example in certain theoretical situations a tax cut could definitely stimulate the

economy so much that government revenues would actually rise, and it would be very nice if that were the actual situation; but unfortunately it isn't. Similarly, it is definitely possible to imagine a situation in which, because of all of the market imperfections Thurow dwells on, a clever strategic trade policy would sharply raise U.S. real income. And it would be very nice if the United States could devise such a policy. But is that possibility really there? To answer that question requires looking hard at the facts.

And so over the course of the last ten years a massive international research program has explored the prospects for strategic trade policy.[2] Two broad conclusions emerge. First, to identify which industries should receive strategic promotion or the appropriate form and level of promotion is very difficult. Second, the payoffs of even a successful strategic trade policy are likely to be very modest—certainly far less even than Thurow's "seven percent solution," which is closer to the entire share of international trade in the U.S. economy.

Research results are always open to challenge, especially in an inexact field like economics. If Prestowitz wants to point out specific failings in the dozens of painstaking empirical studies of strategic trade that have been carried out over the past decade, by all means let him do so. His remarks about the subject, however, strongly suggest that while he is happy to mention strategic trade theory in support of his policy writing, Prestowitz has not read any of the economic literature.

I do, however, agree with Prestowitz on one point. More people should read the works of Friedrich List. If they do, they may wonder why this turgid, confused writer—whose theory led him to predict that Holland and Denmark would be condemned to permanent economic backwardness unless they sought political union with Germany—has suddenly become a favorite of Fallows, Prestowitz and others. The new cult of List bears an uncanny resemblance to the right-wing supply-siders' canonization of the classical French economist Jean-Baptiste Say, who claimed that the economy as a whole could never suffer from the falls in aggregate demand that produce recessions.[3] The motive of the supply-siders was, of course, to cover simplistic ideas with a veneer of faux scholarship.

In contrast to Prestowitz and Thurow, who offer coherent if flawed reasons to worry about international competition,

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[2] The original paper on strategic trade policy was James Brander and Barbara Spencer, "Export Subsidies and International Market Share Rivalry," *Journal of International Economics,* February 1985, pp. 83-100. See also Paul Krugman, ed., *Strategic Trade Policy and the New International Economics,* Cambridge: MIT Press, 1986; Robert Feenstra, ed., *Empirical Methods for International Trade,* Chicago: University of Chicago Press, 1988; Robert Baldwin, ed., *Trade Policy Issues and Empirical Analysis,* Chicago: University of Chicago Press, 1988; and Paul Krugman and Alasdair Smith, eds., *Empirical Studies of Strategic Trade Policy,* Chicago: University of Chicago Press, 1994.

[3] Fallows officially elevated List to guru status in his article "How the World Works," *The Atlantic Monthly,* December 1993, pp. 60-87. Readers may wish to compare the elevation of Say by Jude Wanniski in his influential supply-side tract, *The Way the World Works,* New York: Basic Books, 1978.

Cohen offers a more difficult target. Basically, he asks us to accept "competitiveness" as a kind of ineffable essence that cannot be either defined or measured. Data that seem to suggest the importance of this essence are cited as "indicators," whatever that means, while those that do not are dismissed as unreliable. Both in his article and other writings he has persistently used a rhetoric that seems to portray international trade as a game with winners and losers, but when challenged on any particular point he denies having said it. I guess I don't understand how a concept so elusive can be a useful guide to policy.

My original article in *Foreign Affairs* argued that a doctrine that views world trade as a competitive struggle has become widely accepted, that this view is wrong but that there is nonetheless an intense desire to believe in that doctrine. The article enraged many, especially when it asserted that the desire to believe in competitive struggle repeatedly leads highly intelligent authors into surprising lapses in their handling of concepts and data. I could not, however, have asked for a better demonstration of my point than the responses published in this issue.

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