

edited by Paul R. Krugman

Strategic Trade Policy and the New International Economics

edited by Paul R. Krugman

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Preface

In 1984 the Export-Import Bank of the United States celebrated its fiftieth anniversary. To commemorate this occasion, major corporate and trade organizations sponsored an international conference in Washington, D.C., on October 25 and 26, 1984. The papers delivered at the conference are presented in this volume, which is dedicated to the memory of Walter C. Sauer, formerly first vice president and vice chairman of the Bank.

Like many federal agencies whose origins can be traced to the New Deal era, the Export-Import Bank must respond to both an environment that has changed radically and new intellectual currents. The organizers of the conference, Rosemary A. Mazon, director of international affairs of Allied-Signals Inc. and Rita M. Rodriguez, director of the Export-Import Bank of the United States, decided that the conference should reflect this state of flux. Thus they asked me to invite papers from a group of experts disparate in views but united by their willingness to challenge conventional wisdom about international trade. Many of the authors have been contributors to the recent surge of "new wave" trade theory, with its emphasis on imperfect and dynamic competition. The mix is also leavened, however, with representatives of other schools and other disciplines.

All of the authors made a determined effort to present subtle ideas clearly, with a minimum of jargon and formalism. The result is a collection of papers that will, I hope, help stimulate the creative discussion that can best help not only the Export-Import Bank but all our institutions cope with the changing international economy.

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Introduction: New Thinking about Trade Policy

Paul R. Krugman

The papers in this volume were prepared for an unusual conference, one that brought together two groups of people who rarely communicate with each other directly. On one side are those who are concerned with the real world of trade policy on a daily basis: government officials and representatives of private business. On the other side are academic economists and political scientists—people who *think* about trade policy rather than make it or cope with it. Some of the "real world" participants in this conference have connections with academic research, and some of the academics have put in time in business or government. Basically, however, what the organizers of the conference engineered was a meeting of two quite different worlds.

The purpose of this paper is to help explain why such a meeting of worlds is necessary. Since the volume, like the conference, is primarily aimed at the business and policy communities rather than the academic world, my main purpose is to explain why new thinking about trade policy—thinking that may at times seem abstract and only distantly related to the real problems that arise on a daily basis—is important to practical people. I also want to explain, however, why the gain is mutual, why the academics need to have contact with those who actually make trade policy or live with its consequences.

Theory and Practice in Trade Policy

Practical men and women often have a hard time taking abstract analysis seriously. The equations, diagrams, and jargon that fill most articles in economics seem a long way from reality and of doubtful usefulness. Nor is this prejudice all wrong. It is certainly true that

academics often prefer rigor to relevance, mathematical precision to the difficult task of coping with the messy problems of the real world.

Yet it is a mistake for business and government leaders to dismiss theoretical economic analysis as irrelevant or useless. It is a mistake for two reasons. First, like it or not, what economists say matters for policy. It may seem like a hardheaded and realistic view to say that in practice economic policies reflect politics, not analysis, but it would be wrong. In fact theoretical analysis has a way of setting the terms of policy discussion, and often has a more influential role than is widely appreciated.

John Maynard Keynes made this point best in a famous passage with which he closed his book, *The General Theory of Employment, Interest, and Money:*

[T]he ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed the world is ruled by little else. Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist. Madmen in authority, who hear voices in the air, are distilling their frenzy from some academic scribbler of a few years back. I am sure that the power of vested interests is vastly exaggerated compared with the gradual encroachment of ideas . . . soon or late, it is ideas, not vested interests, which are dangerous for good or evil.

The influence of Keynes's work is itself an illustration of his point. Whether he was right or not, Keynes offered a coherent framework for monetary and fiscal policies that others could not match, and Keynesian thinking has shaped these policies throughout the world for forty years. And as Keynes would have expected, the theoretical arguments of his time have become the common sense of ours, so that men and women who think they are only talking realistically are actually using the language and ideas of the Keynesianism of thirty years ago.

More recently, economic policy on a grand scale has been drastically shaped by ideas originating from the academic world. Monetarism and supply-side economics may or may not be good theories, but their application has certainly made a difference to recent real events.

On a more modest level, theoretical arguments play a much more important role in day-to-day policy formation than one might think. Everyone knows that government decisions respond to interest groups and political considerations. It is excessively cynical, however, to imagine that only these considerations matter. The intellec-

tual quality of an argument may not always be decisive, but other things equal it can make a great deal of difference. Anyone who has participated in the decision process in the U.S. government knows that agencies that are able to back their policy proposals with coherent, well-thought-out analyses have an advantage that can offset substantial political odds, and that conversely even a proposal that has clear political support can fail because it is not well argued. During my own brief period in the government, I often saw economic analyses overridden by political considerations—but that was not surprising. What was more surprising was the way that even strong political considerations could sometimes be held at bay when a proposal seemed clearly without a good analytical foundation. I know of one corporation that had a demand widely supported by other businesses and highly placed friends in the government, yet got nowhere for more than a year, largely because the company's arguments were so easily torn apart by government economists. In the end the corporation hired some high-quality economists to help produce a wellargued report, and for that or other reasons finally got some action. The point is that this firm discovered that the quality of analysis really made a difference to its ability to argue its case.

A very senior U.S. trade official once, in reviewing the political pressures on trade policy, remarked, "All that the protectionists need is a theoretical guru—an Art Laffer of protectionism." I am not proposing anyone in this volume for the honor, but this official was again making the point that analysis matters a great deal. No matter how powerful the interests behind a policy may be, they will have substantial difficulty if their policy cannot be backed by a convincing theory.

So far I have argued only that economic analysis needs to be taken seriously because it plays a real role in policy formation. This may be a critical practical reason, but there is another and better reason: often the analysis is right, revealing considerations that would not otherwise be taken into account. We often expect that because a high-level businessman is an expert in the workings of his own business or industry, he will also be an authority on the impacts of policies that affect his industry. If the policies have their main effect directly, this may well be true. But in economic policy often the most important effects work *indirectly*. In these cases it becomes essential that there be an analysis that steps back from the details to take a more comprehensive view. It is here that economists have something to contribute, for

it is in the tracking of indirect effects that theoretical analysis and mathematical modeling become most useful. Let me illustrate the point with three examples from trade policy.

The first example concerns agricultural trade. Here the conflict with the EEC over agricultural exports has led the United States on occasion to consider using subsidies or special inducements to get a foreign government to buy from the United States rather than our European competitors. The advocates of such moves typically provide an estimate of the additional exports to be generated by the subsidy, based on the direct effect of capture of the targeted market. Yet these estimates are always far too high because they neglect indirect effects. European grain, for example, diverted from one market will have to go somewhere else. Unless the EEC is willing to cut its exports, the result will be U.S. loss of markets elsewhere, with much less net increase in exports than the initial estimate.

A second example is given by the relationship between budgetary policy and international competitiveness. Many economists now believe that the U.S. budget deficit is largely responsible for the rise in the U.S. trade deficit, because the budget deficit drives up interest rates, high interest rates attract foreign capital inflows, these inflows raise the value of the dollar, and the strength of the dollar reduces U.S. competitiveness. The point here is that the most important single factor currently affecting the international competitiveness of U.S. firms appears to arise from policies that are not directly aimed at the markets that are affected and are liable to be poorly understood even by managers with a broad strategic grasp of their own industries. It takes a willingness to engage in abstract reasoning, to get away from the particulars of industries, to understand this kind of policy impact.

Finally, a third example comes from one of the papers in this volume. Gene Grossman, in his paper (chapter 3), points out that exporting sectors must compete with each other for limited resources such as skilled labor. An export promotion policy that favors some sectors will bid up the cost of these resources and lead to reduced competitiveness of others. This means that any program of selective export promotion must be based on a very clear idea of which exports are more desirable at the margin than others, or it is liable to be counterproductive.

What these examples show is that theoretical economic analysis is necessary to make sensible evaluations of trade policy. However, the fact that an economist offers a theoretical analysis does not and should not automatically command respect. What is needed is some

assurance that the analysis is actually relevant. On this score the standard economic analysis of trade policy has begun to look a little wobbly. Although most economists—including at least some of the authors of the papers for this volume—continue to have a strong belief in the desirability of free trade, the economic analysis on which the classical case for free trade was based is beginning to look increasingly unrealistic.

In part this is because the world has changed. For reasons that will be discussed in the next section, the classical case for free trade may have been more in tune with the workings of the economy in 1880 or even 1950 than with the world economy of 1984. In part it is because we have become more sophisticated about the way markets actually work. In either case the point is that although economists may continue to advocate free trade, they will have to update their arguments if they expect to retain their credibility.

The Changing Landscape of Trade Policy

In the first section of this paper I argued that economic analysis of international trade and trade policy is important for businessmen and government officials to understand. The subject of this volume, however, is not simply economic analysis of trade, but "new thinking" about trade policy. Over the last few years the ways in which economists analyze trade have begun to change. This change may in the end change trade policy itself, as we will discuss later. The first step toward understanding the implications of this new thinking, however, must be to look at the reasons for changing ideas.

We can identify three reasons why the economic analysis of trade policy is changing. First, the role of trade in the U.S. economy and the role of the United States in the world economy have changed. Second, the character of international trade itself has been shifting, affecting the United States along with other countries. Third, changing view within the field of economics, especially in the analysis of industrial structure and competition, have affected the views of economists dealing with trade policy as well.

The Changing Position of the United States in the World Economy

The most important change in the U.S. position in the world economy over the past generation has been the steadily increasing importance of trade. In a simple quantitative measure, the shares of imports

and exports in U.S. manufacturing value-added both more than doubled from 1960 to 1980. But the change was more than a quantitative one—it amounted to a qualitative change in the importance of international considerations to the U.S. economy. In 1960 the typical U.S. manufacturing firm was basically oriented toward selling to U.S. consumers and competing with U.S. rivals. If it exported, this was usually a secondary activity; if it faced foreign competition, this was usually a minor irritant. By contrast, in the 1980s international considerations have become a key factor. Many, perhaps most, firms either rely heavily on export sales or face important foreign competitors in the U.S. market.

How does this affect our view of trade policy? What it does is to make some issues traditionally viewed as domestic in nature into issues that have a vital trade policy component. In particular, the issues of market power and excessive rates of return, on one hand, and of innovation and technological change, on the other, cannot now be treated without a serious consideration of trade policy as well.

Consider first the issue of market power. A traditional concern of U.S. policy has been to limit the ability of firms in concentrated industries to raise prices and earn excessive profits at the expense of consumers. Now that the United States has become so much a trading nation, however, the aim becomes more complicated. Protection of the consumer from exploitation remains an issue. To the extent that high returns remain, however, there is the additional concern of trying to maintain or enlarge the share of these returns that goes to domestic firms. As we will see in the course of this volume, there are reasons to believe either that in concentrated industries trade policy can usefully take on an active role in promoting the interests of domestic firms against their foreign competitors, or that we should at least be concerned about the possibility that foreign governments will use trade policies to promote their firms in these industries.

Turning to innovation and technological change, the traditional concern of U.S. policy here has been with promoting activities, such as basic research, that yield valuable spillovers to the rest of the economy. What makes this a trade policy issue is the fact that the United States is now only one of a number of countries engaging in activities that can be argued to yield such spillovers. This means that trade policy can be an important factor in determining the pace of technological change. For example, foreign "targeting" of high-technology sectors through subsidies or protection of home markets

might cause a shrinkage of U.S. industries which in fact yields valuable spillovers to the rest of the U.S. economy—a possibility that is at the heart of concern over the international repercussion of industrial policy.

The Changing Character of Trade

The rapid growth in the importance of trade has also highlighted another change that is not as recent but whose significance is only now beginning to be fully appreciated. This is a change in the *character* of trade, which is no longer very much like the kind of exchange envisaged in classical theory and still taught in textbooks.

Traditional theories of international trade view trade as essentially a way for countries to benefit from their differences. Because countries differ in climate, culture, skills, resources, and so on, each country will have a comparative advantage in producing goods for which its particular character suits it. Such a theory leads one to expect to see trade dominated by exchanges that reflect the particular strengths of economies—for instance, exports of manufactures by advanced countries and exports of raw materials by underdeveloped countries.

Now it remains true that underlying characteristics of countries shape the pattern of international trade. Countries with highly skilled work forces tend to export goods that require skill-intensive production, countries with abundant land export agricultural products, and so on. Since World War II, however, a large and generally growing part of world trade has come to consist of exchanges that cannot be attributed so easily to underlying advantages of the countries that export particular goods. Instead, trade seems to reflect arbitrary or temporary advantages resulting from economies of scale or shifting leads in close technological races.

To understand the kind of transformation that has occurred, consider how the trade of the United Kingdom has shifted over time. In the nineteenth century, the high point of classical economics, one would have had little difficulty in seeing how national characteristics were shaping U.K. trade. The United Kingdom, with its skilled labor, abundant capital, and experience had a comparative advantage in manufactures, and it basically exported manufactures and imported raw materials. By the 1970s, however, U.K. trade consisted primarily of manufactured goods on the import as well as the export side. Even if one looks more closely at the trade data, it is hard to find much of a

pattern in the manufactured goods the U.K. exports and imports; indeed, in many cases very similar goods appear on both sides of the balance.

The reasons for the massive two-way trade in products in which countries have no underlying comparative advantage are not particularly hard to find. They lie in the advantages of large-scale production, which lead to an essentially random divison of labor among countries, in the cumulative advantages of experience which sometimes perpetuate accidental initial advantages, in the temporary advantages conveyed by innovation. What is important is that the conventional economic analysis of trade policy is based on a theory of trade that does not allow for these kinds of motives for international specialization. As I will argue in the next section, traditional conclusions about trade policy may therefore not be right for the kind of world we live in, where these motives are as important in explaining trade as the better-understood forces of comparative advantage.

We should also note a related change in international trade. Among the forces that seem to be driving international specialization, an increasingly important one seems to be technology. In many industries competitive advantage seems to be determined neither by underlying national characteristics, nor by the static advantages of large-scale production, but rather by the knowledge generated by firms through R&D and experience. As we have already noted, however, technological innovation is an activity that may well generate important spillovers to the rest of the economy. Its growing importance in international trade thus reinforces the need for a rethinking of the analytical basis for trade policy.

New Tools for Analysis

The final strand in the changing nature of trade policy analysis is the application to international economics of new ideas coming from other fields of economics. In particular, the 1970s were marked by major innovations in the field of industrial organization, with new approaches developed for the analysis of industries in which only a small number of firms are competing at any one time—"oligopolies," in the jargon of the economics profession.

Much traditional economic analysis is based on the working assumption that markets are not too far from being "perfectly competitive"—that is, there are many producers, each of whom is too small

to attempt to influence prices or the future actions of his competitors. What the changing pattern of trade has done, however, is to make this a clearly unworkable assumption for trade policy. As just noted, a good deal of trade now seems to arise because of the advantages of large-scale production, the advantages of cumulative experience, and transitory advantages resulting from innovation. In industries where these factors are important, we are not going to see the kind of atomistic competition between many small firms that is necessary for "perfect" competition to be a good description of the world. Major U.S. exporters like Boeing or Caterpillar, and many smaller firms as well, are in a different kind of competition from that facing wheat farmers or garment manufacturers. They face a few identifiable rivals, they have some direct ability to affect prices, and they make strategic moves designed to affect their rivals' actions.

Firms in this situation are described by economists as being in "imperfectly competitive" markets. This does not mean that competition is not fierce or that the firms are somehow misbehaving. What it means is simply that what can happen in these markets is different from, and more complicated than, what is captured by the simple concepts of supply and demand. The imperfection, in other words, is in the economist's understanding, not in the world.

Although our understanding is imperfect, it is getting better. Important new work has helped reveal, in particular, how the strategic choices of firms are influenced by and in turn help to determine the structure of industries. This new work was originally intended for thinking about domestic issues such as antitrust, regulation, and innovation policy. As we have seen, however, the distinctions between domestic and international issues have been breaking down. Thanks to the new work on imperfectly competitive industries, international economists are in a position to approach the problems raised by the changing environment with an expanded set of tools.

In summary, then, the rethinking of the analytical basis for trade policy is a response to both a real change in the environment and intellectual progress within the field of economics. First, the increased importance of trade has made necessary consideration of the international dimension to issues traditionally viewed as purely domestic. Second, the changing character of trade, away from trade based on simple comparative advantage and toward trade based on a more complex set of factors, has required a reconsideration of traditional arguments about trade policy. Finally, increased sophistication