Trade and the Structure of American Industry
World Bank Reprints

No. 203. Peter T. Knight, “Brazilian Socioeconomic Development: Issues for the Eighties,” *World Development*

No. 204. Hollis B. Chenery, “Restructuring the World Economy: Round II,” *Foreign Affairs*

No. 205. Uma Lele and John W. Mellor, “Technological Change, Distributive Bias, and Labor Transfer in a Two Sector Economy,” *Oxford Economic Papers*

No. 206. Gershon Feder, “Adoption of Interrelated Agricultural Innovations: Complementarity and the Impacts of Risk, Scale, and Credit,” *American Journal of Agricultural Economics*


No. 211. Gregory K. Ingram and Alan Carroll, “The Spatial Structure of Latin American Cities,” *Journal of Urban Economics*


No. 213. Salah El Serafy, “Absorptive Capacity, the Demand for Revenue, and the Supply of Petroleum,” *Journal of Energy and Development*


No. 215. Michael Cernea, “Modernization and Development Potential of Traditional Grass Roots Peasant Organizations,” *Directions of Change: Modernization Theory, Research, and Realities*

No. 216. Avishay Braverman and T. N. Srinivasan, “Credit and Sharecropping in Agrarian Societies,” *Journal of Development Economics*


Trade and the Structure of American Industry

By J. MICHAEL FINGER

ABSTRACT: In the past two decades the proportion of U.S. gross national product that enters international trade has increased from four percent to over eight percent. This rapid growth of international trade, particularly U.S. trade with the more rapidly developing countries, has been an important source of vitality for the U.S. industrial sector. The growth of trade has necessitated some transfer of resources from one industry to another. The availability of foreign goods has also reduced the market power of U.S. industries and with it the power of resources in these industries to command rates of return higher than those earned in more competitive sectors. The magnitude of the former sort of adjustment has generally been overstated and the need for the latter sort strenuously resisted. Government policy has tended more to reduce the flexibility of the industrial structure than to enhance it. Administrative mechanisms that deal with trade matters reflect the mercantilist presumption that exports are the gains from trade and imports the costs. Because there is no administrative mechanism through which consumers or users of imports may put forward their interests, trade disputes very quickly become political issues.

J. Michael Finger is a senior economist on the World Bank's Development Policy Staff. He is the author of the trade chapter in World Development Report 1981, has lectured around the world on trade and development issues, and has published a number of articles on trade policy and North-South relations. From 1974 to 1979 he directed the U.S. Treasury Department's Office of Trade Research.
OVER the past few decades the U.S. economy has indeed become more “international.” In 1980, almost eight percent of the goods and services consumed were imported, as compared with four percent in the early 1960s. This internationalization has produced stresses and has mandated adjustments that are, from one point of view, problems, and from another point of view, opportunities.

Expanding trade is more often—or at least more loudly—described as a problem than as an opportunity. For example, a labor union official, testifying before the United States Congress, suggested that unless the growth of imports was controlled, the United States would eventually become “a nation of hamburger stands.” This is a graphic way to express the widespread concern that U.S industries, paying American wages, cannot expect to compete with manufacturers in low-wage countries and must either go out of business or move their production facilities abroad. Expanding trade, this view suggests, will cause the U.S. manufacturing sector to disappear, leaving only service sector jobs—in hamburger stands and that sort of thing.

Perhaps in no area of public policy are half-truths and misinformation as abundant, influential, and even institutionalized as in the area of trade policy. The information to which the concern about becoming a nation of hamburger stands refers, the increase of imports, is, of course, a truth. But the missing half of the story is that we now export eight percent of the goods and services we produce, as compared with four percent 20 years ago. As to trade with low-income countries, it is true that U.S. manufactured imports from low-wage countries have increased tremendously, in volume almost fivefold over the 1970-80 decade, or in value by almost $25 billion. Yet at the same time, U.S. exports to these countries have increased by 50 percent more—by almost $37 billion. On a global scale, while developing country exports of manufactured goods to industrial countries more than doubled in volume, the increase of industrial countries’ manufactured exports to developing countries was three times larger. To cut off the U.S. manufacturing sector from trade, particularly from trade with the developing countries, would isolate it from a market that is expanding more rapidly—in net, not just gross terms—than the U.S. market and other industrial country markets. Far from retarding the U.S. industrial sector, trade with the low-income countries makes a significant contribution to the vitality of this sector.

The fear that a country will come to import everything and export nothing is one of trade policy’s most common misconceptions. If firms and individuals from the United States sell less and less in foreign countries while buying more and more from them, they will soon run out of the foreign currencies needed to buy goods in foreign countries. Or, before that, their attempts to buy foreign currency for dollars will push up the dollar price of foreign currencies, making foreign goods more expensive to Americans, whose incomes are earned in dollars, and American goods less expensive to foreigners, whose incomes are earned in foreign currencies. Unless the government intervenes, normal price adjustments will maintain balance between exports and imports.

and will prevent a country from becoming an importer of everything and an exporter of nothing.  
Thus both common sense and the facts of the matter indicate that increased trade with the rest of the world is not immiserizing.

ADJUSTMENT TO INCREASED TRADE

Capitalizing on the opportunity that increased trade provides requires two kinds of adjustment. One of these is familiar—the shifting of resources from activities that are performed more efficiently abroad to sectors in which the domestic economy has a comparative advantage. And as markets become international, the market power of national firms is eroded. Particularly at the policy level, the need to adjust to this change is more often ignored than discussed.

Moving resources

Though the proportion of total U.S. production that enters into international trade has doubled in the past 25 years, the amount of shifting of resources from industry to industry that this has entailed has been minimal. For one reason, the doubling of the trade ratio has involved only 4 percentage points of gross national product (GNP) spread over more than 20 years, while total employment in the U.S. economy has increased by more than three percent per year. And a large proportion of the increase of trade has involved intra-rather than inter-industry specialization. As the article on the textile industry in this volume illustrates, adjustment has been primarily a matter of eliminating certain product lines and expanding others. The U.S. textile industry—though not the apparel industry—has, by adjusting its product mix toward the more sophisticated products using more technologically advanced production methods, regained parity with foreign producers, so that U.S. exports of textiles are now considerably larger than imports. Furthermore, the proportion of intra-industry trade in the growth of a trade has been less in the textiles sector than in many others. In machinery and capital goods, for example, more than three-fourths of the post-World War II expansion of trade has involved intratrade specialization, rather than the contraction of one industry and the expansion of another.

As to actual magnitudes, relevant evidence may be taken from U.S. Labor Department estimates of the impact of the balanced reductions of trade barriers agreed to by the United States and by our trading partners at the Tokyo Round of international negotiations. Of the 297 U.S. manufacturing industries affected, only 30 have estimated net changes of employment of more than one-half of one percent of their initial level. And in only three small industries (pottery products, artificial flowers, and lace goods), accounting among them for less than one-tenth of one percent of U.S. manufactured output, will increased trade cause employment to decline by as much as five percent.

Reduction of market power

Internationalization has brought forward another sort of adjustment

issue—one which is more a question of adjustment within industries than of a resource transfer between industries. Industries such as auto and steel have long been highly concentrated domestically and have been protected from foreign competition by tariffs and location. As Norman S. Fieleke's article in this volume points out, differences in highway systems and in gasoline prices led to significant differentiation between American autos and autos produced for European and Japanese markets, which insulated American producers from international competition over the major part of their product line. As tariffs were reduced throughout the 1950s and 1960s, nearly every country's industrial sector was growing rapidly, and domestic capacity in basic industries such as steel was always strained to keep up with domestic demand. This left producers with little incentive to compete for foreign markets.

However, the growth of world trade in industrial products, excess capacity stemming from lower industrial country growth rates than were expected when present capacity was installed, and rising energy prices in the United States have intensified across-border competition for markets. In determining the market power of producers, the relevant definition of market is now international, not domestic. Though the number of producers located in a country may have changed very little, the number that compete for the market in that country has increased considerably.

The changes that adjustment to greater competition within industries demands do not necessarily include a net transfer of resources out of such industries. This erosion of the market power of national firms calls less for changes in the structure of production between industries than for changes in the structure of distribution. As the articles in this volume on the steel and auto industries point out, until they were exposed to international competition, profit rates were high. Wage rates continue to be much higher than in other industries. With the market power of such industries diminished by international competition, the market will no longer support the tradition of rates of return higher than in other industries. Much of the clamor for import relief for such sectors is, implicitly, pressure on the government to defend that tradition.

Policies aimed at assisting people to transfer from one industry to another are not appropriate for such industries. In opportunity cost terms, that is, when resources are valued at what they would earn in other industries, the United States is not a high cost producer. The need here is not to shift resources to higher productivity, and ultimately higher-paying alternatives, but to persuade them to accept the lower rates of return—the rates enjoyed in other industries—required by the loss of their market power.

The overtaking of the American economy

A final element in our current trade situation comes less from the internationalization of the American economy than from the overtaking of it by other economies. Theory suggests that the mix of traded goods will constantly change. As countries at lower stages of development expand their capacity, their

exports of simpler manufactures whose technologies they have mastered will expand, allowing them to buy larger volumes of capital goods and other sophisticated manufactured goods from the industrial countries. Over time, the pattern of trade between the industrial and the more advanced developing countries should become more and more like trade among the industrial countries—intraindustry trade within the more sophisticated industries, based on product-line economies of scale rather than on industrywide differences in technology between countries. The next tier of developing countries, just beginning on the path to industrialization, would become the world’s supplier of simpler manufactures.

In the early 1960s the United States was further along this path than any other country, and our manufactured exports were based in large part on our huge capital stock and our technological advantage over the rest of the world. It is, however, well known that for two decades the U.S. rate of investment has been lower than rates in most other industrialized and many developing countries. The share of GNP allocated to investment in new plants and equipment has been three times as large in Japan, and in a number of Asian developing countries, as in the United States. A low overall rate of investment shows up in specifics such as our aging steel capacity and a stock of machine tools in place with a higher average age than in any other industrial country except the United Kingdom. As a result, the composition of our exports is changing—a smaller share for machinery based on technological advantage and a larger one for agricultural exports based on abundant farmland. Viewed only from the perspective of export composition, our economy is moving back toward the nineteenth century.

**POLICY CONSIDERATIONS**

Being overtaken by the rest of the world may be embarrassing, but it is not a failing. It might be quite sensible for American society to choose to consume more than 90 percent of our output and to invest a proportion that is, by the numbers of many other countries, quite small.

One senses, however, some reluctance to live with the implications of this choice, particularly with its trade implications. Relatively slow growth implies relatively large changes in the composition of U.S. imports and exports and therefore relatively large shifts of resources from one sector to another. Ascribing these stresses to “unfair” foreign competition has considerable political appeal.

*Adjustment policy*

Shifts of resources contribute to the total output and the overall efficiency of the economy, but often come in conflict with another social objective. Many of the programs and policies that influence the flexibility of the industrial structure were not established with adjustment as their primary objective. They arose from the twentieth-century liberal concern with so-called economic security or, more particularly, from concern at a policy level with the side effects of economic growth. The general objective of these policies was to minimize the dislocations, and to offset the income losses embedded in the responses of economies to changes of consumer tastes and of modes of production. But the discomfort of remaining in a declining sector and the potential gains
from shifting to an advancing one are the incentives by which a market economy shifts resources from one use to another, and these shifts play a major role in economic growth. Thus these policies have often tended to compromise the capacity of the economy to adjust and grow.4

Discussion of adjustment policy has tended to concentrate sequentially on two questions: (1) how to shift resources from lower to higher productivity uses and (2) how to choose and promote industries with high growth potential and strong positions in international trade.

Policy analysts have tended first to look for policies that serve the economic security and the growth-efficiency objective simultaneously, that is, to try to find a way to avoid trading one constituency against another. The “golden path,” however, has not been found. Reviewers have more or less unanimously agreed that public policy to promote economic security has often sought to delay the transfer of resources, or at least it has had that effect.5

Thus answers to the first question did not produce a golden path to security—a path that had no costs in terms of growth and efficiency. Indeed, it was generally found that “the greatest contribution to rapid reallocation has probably been the pursuit of full employment and a generally high level of demand.”6

To promote adjustment through growth, one obviously has to promote growth, and this can be approached in either a macro or a micro context. In macro terms, growth involves the allocation of a larger share of GNP to investment and research. It obviously reduces short-run consumption possibilities. An alternative approach, which might be described as “economic growth on the cheap,” is suggested by the second policy question listed previously—how to pick industries with high growth potential and promote them, that is, how to transfer resources to winners and away from losers without increasing the total amount of resources devoted to research and investment.

Japan is frequently given as the prime example of the effectiveness of picking and promoting industrial winners. The attraction of the Japanese model apparently is that it offers a costless solution to the problem of lagging economic growth: by having government direct or induce the available amount of savings to the “right” industries, the growth rate of aggregate output that a given savings rate produces will be increased. On careful examination, however, this interpretation does not fit the Japanese case very well. Several major growth industries—for example, autos and radio and television receivers—were not picked by the Japanese government. Investment in Japan was no more growth efficient than elsewhere, in the sense that a percentage point of GNP devoted to investment did not buy more growth in Japan than it did in other countries. There were simply more percentage points of investment in Japan. With an abundance of capital available, the usual response of the Japanese government to pressures generated by tax advantages or other incentives for particular industries was to extend

6. Ibid.
those advantages to yet other industries. Aggressive entrepreneurs and a very high savings rate—not its bureaucracy—are the secrets to Japan's success. The Japanese government has looked good not because it has rationed capital skillfully but because it has not had to ration capital.7

One frequently hears that the key to successful adjustment policy is indicative planning. The government should develop a scientifically precise, long-run plan identifying which industries will expand and which will contract and then implement that plan. The objection that it is not easy to predict which industries will—or should, on efficiency grounds—expand or contract is met by the suggestion that policy concentrate on a few extreme cases, the obvious winners and losers. A look at recent trade statistics would provide preliminary lists, and professional analytical studies of these industries would then produce the final determinations. The needed technical expertise is available on government staffs or can be hired.

Apart from the technical questions, our open political system requires that such determinations be enforced and defended at a political level. But at that level technical evidence is not a secure basis for a political sorting of those industries that will receive public support and those that must fend for themselves. Those who lose at a technical level are free to appeal that decision at a political level, as was the case recently when the U.S. International Trade Commission determined that imports were not a major cause of injury to the U.S. automobile industry. Even if the government has a solid technical case—in the sense that impartial, trained experts would agree that the government's decision is correct—it may not be able to make its case stick at the political level. At that level of public debate, the relevant audience will not be competent to evaluate conflicting technical arguments.

Such a government decision, if it is to stick politically, must rely for its defense on the competence of the technical staff that furnished the data for the decision, that is, on the expertise of the government's witnesses. In the United States, there is a tradition of disrespect for public officials, and the last two presidents elected have run against the federal bureaucracy. It would thus be impossible for a president to defend an industrial plan by pointing out that it was developed by the same bureaucracy that he indicted during his election campaign as bloated and incompetent.

In the U.S. political system, economic distress seems to be a stronger political force than economic potential. Our industrial policy has tended to be a sequence of rescue programs for firms in trouble, always with the intention of putting the distressed firm back on its feet, rather than of transferring resources to other uses and usually adorned with accusations of unfair practices by the foreign competition.

In this setting, trade policy can hardly aspire to more than a minimization of the number of such programs and the degree to which they distort trade. Defending the openness of our economy will thus continue to involve the tedious job of identifying the protective impact of industry and other programs, calcu-

lating the costs of such protection, and attempting to bring this information to bear on the relevant decisions, which may themselves be difficult to identify.

**Administrative mechanisms**

Some trade questions are decided through formal decision mechanisms. But on these, as on other trade issues, the benefits from trade tend to be widely dispersed among many users and consumers while the costs fall on a smaller group of producers that compete with imports. For this and other reasons, the policy mechanisms tend to reflect the mercantilist presumption that exports are the gains from trade and imports the costs. Thus in so-called escape clause cases—the question of restricting auto imports from Japan is a recent example—the U.S. International Trade Commission is required to investigate injury to domestic producers from import competition. The law requires no such investigation of gains to users of imports—to other producers who use the imported good as an input, or to consumers of a finished good. Indeed, in framing its recommendations for the president, the International Trade Commission is precluded by law from considering user or consumer gains from trade.

The dumping and countervailing duty mechanisms are similarly biased toward the interests of producers who compete directly with imports. The legal objective of these mechanisms is to police the fairness of trade practices employed by foreigners when they sell in the U.S. market. The mechanisms pursue that objective by restricting imports—in design, from unfair exporters only. They are, therefore, economic instruments with the power to restrict imports, and they will, the simple idea of greed suggests, attract those with an interest in having imports restricted. This will include not only firms and industries beset by unfair competition but more generally those least favorably situated vis-à-vis their foreign competitors' costs. Pressures from such interests have brought about changes in the details of the dumping and the countervailing duty mechanisms. They have come over time to put more severe limits on the trade practices foreign sellers may employ in the U.S. market than parallel parts of domestic antitrust law places on domestic firms. They tend also to concentrate on foreign versus domestic costs rather than on the nature of the trade practices that foreign firms employ.\(^8\)

While calculation and publication of the costs of protection will surely influence the political climate, this climate has little impact on those structured decisions. Legislation would be needed to build this information into the decision mechanisms through which trade policy is administered.

The government might find political, and not just economic, merits in institutional changes that allow them to judge these formalized trade questions in the light of overall costs and benefits. Under present arrangements, the technical commissions and offices that investigate trade complaints may take up only the interests of producers who compete with imports. As a result, consumer groups have no alternative

---

but to go over the heads of such officials and apply pressure on politicians. As consumer interests have become more vocal, trade disputes have tended to escalate into higher-level disputes than they might have if, at the lower levels, a technical outlet were provided for consumer as well as for producer interests.

Though our administrative trade policy mechanisms are slanted toward protection, they have been used with restraint. In the five years from 1975-79, only 2.2 percent of U.S. manufactured imports were granted relief under the antidumping and countervailing duty statutes, and only 3.8 percent under the escape clause. The expansion of trade was much greater than the spread of protection, even in this 1975-79 period, when there was much talk of the rise of the "new protectionism." The U.S. market remains the most open of the major industrial country markets.


No. 225. George Psacharopoulos, "The Economics of Higher Education in Developing Countries," *Comparative Education Review*

No. 226. Katrine Anderson Saito and Delano P. Villanueva, "Transaction Costs of Credit to the Small-scale Sector in the Philippines," *Economic Development and Cultural Change*


No. 230. Abdun Noor, "Managing Adult Literacy Training," *Prospects*


No. 233. Keith Bradley and Alan Gelb, "Motivation and Control in the Mondragon Experiment," and "The Replication and Sustainability of the Mondragon Experiment," *British Journal of Industrial Relations*


Issues of the World Bank Reprint Series are available free of charge from the address on the bottom of the back cover.
The full range of World Bank publications, both free and for sale, is described in the World Bank Catalog of Publications, and of the continuing research program of the World Bank, in World Bank Research Program: Abstracts of Current Studies. The most recent edition of each is available without charge from:

PUBLICATIONS DISTRIBUTION UNIT
THE WORLD BANK
1818 H STREET, N.W.
WASHINGTON, D.C. 20433
U.S.A.