
DOES PROTECTION REALLY PROTECT?

David G. Tarr

DURING THE PAST YEAR there has been considerable agitation for government intervention to keep out steel imports, culminating in a congressionally authorized decision by President Reagan to limit steel imports to 18.5 percent of domestic consumption. (Semi-finished steel is excluded from the calculation.) Will this program help the steel industry become competitive in the long run, or will it exacerbate its problems? And what will be the likely costs to the economy and consumers?

Quotas: The Background

The U.S. steel industry has enjoyed significant protection from imports during the past fifteen years. Between 1969 and 1974 the U.S. government negotiated "voluntary restraint agreements" with Japan and the European

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Economic Community limiting their exports to this country. In 1978, the Carter administration initiated the "trigger price mechanism," which was meant to ensure that steel imports priced below a certain level would be subjected to an expedited anti-dumping investigation.* Both initiatives were meant in large part to help the U.S. industry modernize so that it could compete more effectively.

Its competitive position worsened instead, however, and soon there arose new protective demands. In 1982 most of the large U.S. producers undertook a major effort to obtain tariff protection by filing complaints under the anti-dumping and countervailing duty laws (at which point the Reagan administration dropped the trigger price mechanism program). The European Community settled those complaints by agreeing to quotas on exports of specific steel products.

In early 1984, the United Steelworkers of America and Bethlehem Steel Corporation filed

*Robert Crandall (1981) finds that the trigger price mechanism caused imported steel prices to increase by approximately 9 percent. See my analysis in the FTC's 1977 staff report on steel for an evaluation of the distributional and efficiency consequences of the trigger price mechanism compared with tariffs and quotas.

petitions with the International Trade Commission for relief from imports under section 201 of the Trade Act of 1974, which allows the exclusion of fairly traded imports if they are causing substantial injury to the U.S. industry. The ITC recommended that quotas be imposed, but President Reagan formally rejected protection through the 201 process. Instead he directed U.S. Trade Representative William Brock to negotiate more voluntary restraint agreements with foreign governments so as to reduce imports to 18.5 percent of domestic consumption, excluding semi-finished steel.

After the President's program was announced, Congress passed as part of the Trade and Tariff Act of 1984 a nonbinding "sense of the Congress" resolution that the President should negotiate agreements to reduce imports to between 17 and 20.2 percent of U.S. domestic apparent consumption for up to five years. It indicated that Congress would consider taking appropriate action if the goal was not achieved. By late December 1984, the administration announced that it had reached quota agreements with Japan, South Korea, Spain, Brazil, South Africa, Mexico, and Australia. Meanwhile the agreement with the European Community remained in effect (a new one was negotiated in late 1985), and a quota for Canada is now being considered. The administration expects its quota program to reduce imports to 18.5 percent of U.S. sales (excluding semi-finished), even though, owing to delays in implementing

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consists of inefficiency costs to the economy while the remainder constitutes a transfer from consumers' pockets to producers'. Ironically, foreign producers reap more of these benefits than U.S. producers, \$557 million compared with \$428 million a year. (Quotas increase foreign producers' profits because the higher price they receive more than makes up for the lower

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volume of sales.) Over its five-year scheduled life, the quota will cost consumers \$4.8 billion and the economy \$3.4 billion in present-value terms. It will succeed in temporarily protecting 9,951 jobs, which works out to a cost to consumers of \$185,000 a year for each job saved, \$80,700 of which consists of inefficiency costs to the economy.

Since the program is supposed to run for no more than five years, we estimated the benefits of the quota to be the present value of the deferral of the earnings losses of workers who will be displaced in five years but, without the quota, would have been displaced immediately. We found that for every dollar of earnings losses saved by otherwise displaced workers, consumers lose \$35 and the U.S. economy loses \$25. The estimates understate the full costs to the economy in a number of ways. They do not, for example, include the money that has been spent on lobbying efforts and on campaign contributions by firms that are trying to keep the quotas.

How the Industry Got into Trouble

After being a net exporter of steel for many years, the United States became a net importer in 1959 and has remained one ever since. During the 1960s, though imports were still gradually rising, domestic shipments continued to show a slight increase, a trend that roughly continued through the 1970s. The real disaster for the domestic industry did not come until 1982

and 1983, when capacity utilization plummeted to 48 and 56 percent respectively and shipments fell to about 65 percent of the 1979 level. What had been modest profits for domestic producers turned to losses of more than \$2 and \$3 billion a year respectively in the two years. Since total stockholders' equity attributable to the domestic steel industry amounted to only \$11 billion in 1982 and \$8 billion in 1983, some parts of the industry seemed to be headed for bankruptcy.

Employment trends have been even more striking. Total industry employment fell by half between early 1979 and 1983, from around a half million to around a quarter million. In 1984 the level of shipments and capacity utilization recovered by 9 and 12 percent respectively, and losses shrank, though they did not disappear.

Is there any reason to believe that the new import restraints will be any more successful at stimulating modernization than the voluntary restraint agreements of 1969-74 or the trigger price mechanism of 1978-82? To answer that question, we must first ask what has caused the industry's difficulties. There are four plausible reasons: the high cost of labor, the decline in demand for steel, the effect of exchange rates, and the rise of mini-mills.

Labor Costs. During the 1960s and early 1970s hourly labor costs in the steel industry had been less than 50 percent above the average for U.S. manufacturing production workers. During the late 1970s, however, they soared to the point that by 1982 steelworkers were earning almost double (90 percent above) the U.S. average. Steelworkers around the world typically receive a wage premium that is possibly explained by the industry's greater training costs or physical capital or by the nature of the work. But in European countries, steelworkers earn a much lower premium compared with other manufacturing workers—between 7 and 32 percent. Only Japanese steelworkers earn a wage premium comparable with that in the United States, at about 75 percent.

These differences do not reflect variations in productivity. Whereas in the mid-1960s the U.S. steelworker produced roughly twice as much steel an hour as his Japanese, French, or German counterpart (in the 1950s it was actually more than twice as much), by 1982 the

The Statutory Background

Countervailing and Antidumping Duty Laws.

These provisions deal with imported goods that are alleged to be subsidized or dumped. The Department of Commerce investigates whether the goods in question have been subsidized by a foreign government or "dumped" in this country. The latter means that they have been sold at a price that is less than the larger of two figures: the foreign cost of production (including profit), or the foreign price. The International Trade Commission investigates whether a U.S. industry has been materially injured as a result of the imports. If both agencies find in the affirmative, and the cases are not settled, then duties in an amount equal to the percentage subsidy or percentage dumping margin are applied. At no point in this process is either agency allowed to give any consideration to the costs of such action to either consumers or the economy.

Section 201 (Escape Clause) Cases. Under Section 201 of the Trade Act of 1974, also known as the "escape clause" provision, industries can receive protection from fairly traded imports if the imports are a substantial cause of injury to the industry. The International Trade Commission must determine that imports are a cause of injury to the industry that is at least as great a cause of injury as any other cause. This is a more difficult test for the industry to pass than the injury test under the countervailing and antidumping duty laws. If the commission finds in the affirmative, the President must decide on a remedy that could include tariffs, quotas or adjustment assistance to the industry, among other possibilities. The initial remedy awarded to the industry can last for no more than five years. In making his decision, the President must consider, among other factors, the national interest and costs to consumers.

French and German steelworker had caught up to the American in productivity and the Japanese worker had surpassed him.

These trends have combined to give U.S. steel manufacturers a significant disadvantage in labor costs. In 1982 it took roughly ten work-hours at \$21.19 an hour to produce a ton of steel in the United States. The corresponding figures

for Japan were eight hours and \$10.69 an hour. This means that U.S. labor costs exceeded Japanese by more than \$125 a ton, for a product that costs roughly \$400 a ton. Because the United States has little cost advantage over its com-

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petitors on raw materials or capital inputs (and probably a slight disadvantage, given the decline in the quality of Mesabi Range iron ores and the high rate of interest on U.S. borrowings for capital equipment), this disadvantage is significant.

Some thought the problem was righting itself in 1973, when the United Steelworkers Union signed an "Experimental Negotiating Agreement" with the major integrated steel companies. In return for a no-strike pledge, the union got wage increases based on productivity gains plus changes in the cost of living. The strike threat had been damaging to the domestic industry's competitive position even when it was not carried out, because when a strike deadline neared, users would buy more imported steel as a precaution against a prolonged strike, and once imports had gained this foothold, they were harder to displace.

The unanticipated high rates of inflation in the late 1970s, however, made the experimental negotiating agreement far more costly to the companies than they had expected, and the pact ended in 1982. The following year steelworkers' compensation fell, their wage premium declining to about 75 percent above the U.S. average. Companies also succeeded in modifying some restrictive work rules. But given the large labor cost differentials that remain, further cutbacks will be needed for U.S. integrated mills to become competitive. Market protection might well encourage labor intransigence and management weakness in the next round of contract negotiations.

Decline in Demand. Since the 1950s the rate of growth in steel demand has been lower in this

country than in economies at earlier stages of development. Products are requiring less steel, both because manufacturers have been switching to aluminum, plastic, and other substitutes, and because they have "downsized" automobiles and other products. By my estimate, these effects account for a decline in steel usage by the U.S. automobile industry of more than 4.5 million tons a year. Similarly, whereas 70 percent of all cans were made of steel in 1976, 70 percent were made of aluminum in July 1983—a drop in steel demand that has been as important as the changes in the auto industry. More steel is also being brought into the country indirectly in the form of manufactured products. The amount of steel imported in this way rose from 1.2 million tons a year in 1962 to 5.2 million tons in 1973.

How will the quotas imposed in 1984 affect long-run demand for steel? By causing U.S. steel prices to rise, they will promote use of the alternative materials that are already available and encourage research and development to find new ones. Moreover, the manufacturers of products that use steel will have a greater incentive to locate their plants abroad where they can benefit from the lower world prices. This trend will also increase imports of steel con-

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tained in manufactured products. It will be difficult for the U.S. steel industry to win back sales once investments in alternative technologies or in manufacturing sites have been made.

Exchange Rates. The value of the U.S. dollar (measured against an average of foreign currencies and adjusted for differing inflation rates) rose 50 percent from 1980 to 1984. This of course made all U.S. goods more expensive compared with foreign goods. A weakening of the dollar would certainly help the U.S. steel industry, as well as all other domestic industries that compete with imports.

But trying to rectify the situation industry by industry will be counterproductive. Successful protection reduces the dollar value of imports in protected sectors. With fewer dollars flowing abroad, the value of the dollar will rise. The higher dollar will impose costs on the exporting and the unprotected import-competing sectors of the U.S. economy. Thus protection only shifts the burden of adjusting to a high dollar to other sectors of the economy.

Mini-Mills. The pessimistic forecast for U.S. integrated mills does not extend to "mini-mills." These are small, unintegrated plants that recycle scrap into certain rolled steel products such as bars and rods. Mini-mills often reap high profits from a combination of modern technology, good location (in growing southern and western markets overlooked by the majors), and a work force unencumbered by restrictive union rules. Since 1960 these operations have increased their share of U.S. steel production from about 3 percent to 20 percent, most of this ground recaptured from imports. They are likely to make further inroads into the sales of the major domestic producers. Indeed, if they succeed in developing continuous casters that allow them to produce flat-rolled products at a lower minimum efficient size, the inroads could be dramatic. This development may also depend on whether producers can turn direct reduction (a process that renders iron ore usable as raw material in mini-mill furnaces, thereby dramatically reducing scrap requirements) into a widespread, economically viable option. Otherwise, scrap prices may be bid up, cutting into the mini-mills' profitability.

To the extent that high labor cost and a decline in demand have caused the domestic industry's problems, then, protection can be expected to make things worse. Likewise it will not reduce, and might intensify, the competitive pressure from mini-mills. Finally, to the extent that exchange rates are the culprit, protection might help—but roughly only to the degree that it hurts other industries.

Enforcing the Unfair-Competition Laws

Are the new import restrictions simply a substitute for the protective effects of fully enforcing the existing anti-dumping and anti-subsidy

laws? Could they thus be an appropriate way to create a "level playing field" for fair competition? Almost certainly not.

Dozens of unfair trade practice charges against steel importers have been investigated

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by the Department of Commerce and the International Trade Commission in the past few years. But there have been no significant findings of unfair trade against the four major sources of U.S. steel imports—Japan, Canada, South Korea, and West Germany. In 1982, the Department of Commerce decided to ascertain the level of subsidy to European steel producers. It found that significant subsidies were going to the British Steel Corporation, the Italian firm Italsider, and some of the French and Belgian firms. But it found either no subsidies or de minimis subsidies for most of the rest of the European Community, including almost all the German firms, the Netherlands industry, and fourteen small British firms.

These findings would probably have led to no effective use of countervailing duties against European imports; even if a few subsidized firms were excluded from the market, other unsubsidized Europeans could take their place. Yet the ensuing voluntary agreement restrained exports from *all* European Community producers, including those that were specifically found to be unsubsidized. If all unsubsidized foreign producers—especially Japan, with its huge excess capacity—were allowed a free hand, imports would certainly maintain, if not increase, the roughly 25 percent share of U.S. consumption they currently hold. Thus strict enforcement of unfair trade laws will not solve the domestic industry's problem. Excluding foreign steel will require not a "level playing field," but a playing field that is tilted in favor of domestic firms.

Not only would a "level playing field" fail to protect domestic producers, but the existing fair-trade laws already tilt the field against for-

foreign producers. The anti-dumping side of the unfair trade practice laws prevents the import of many goods that are in fact fairly traded. For example, no one would seriously accuse the

the period after World War II in which foreign firms had used unfair trade practices to create monopoly power and then extract monopoly prices and profits.

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U.S. steel producers of dumping steel on foreign markets. But because of the huge losses these companies incurred in 1982 and 1983, if the U.S. laws, as interpreted by the Department of Commerce, had been applied against them in foreign markets in those years, they would have been found guilty of dumping by large margins.

The countervailing duty side of the law likewise keeps out many fairly traded goods. Under these rules, foreign firms that receive aid from their home governments will generally be charged with the full amount of the subsidy even if it is expressly meant to compensate the firm for government-imposed costs. Recently Anthony Cockerill found that of the substantial subsidies received by the British Steel Corporation, about two-thirds were soaked up by government-imposed costs. For example, government restraints on steel price increases over the period 1972-74 cost British Steel between \$650 million and \$1 billion in profits.

More fundamentally, even if some unfairly subsidized goods should happen to enter this country, our national interest, as opposed to the parochial interests of steel firms and their employees, would not be damaged. The United States would enjoy the benefits of low-priced imported steel just as it would if the low prices were strictly due to comparative advantage. A problem might arise if the foreign firms succeeded in creating a monopoly for themselves in this country and then proceeded to raise prices to extortionate levels. In view of the great diversity of steel suppliers throughout the world and the fact that domestic firms still account for three-quarters of U.S. sales, this danger seems virtually nonexistent. In fact, Richard Dale has reported that he could find no documented cases in the entire Western world in

THE PROGRAM OF VOLUNTARY RESTRAINT agreements for steel now in effect is estimated to cost consumers more than \$1 billion and the economy more than \$750 million a year respectively. The return on this investment will probably not be a revitalized domestic industry. On the contrary, the labor costs and demand problems of that industry are likely to be exacerbated by the protection, and mini-mills are likely to make further inroads into the sales of major producers. Far from saving the integrated sector of the domestic industry, protection may well threaten to do it more damage. ■

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