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Chapter Author: Michael O. Moore

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# The Rise and Fall of Big Steel's Influence on U.S. Trade Policy

Michael O. Moore

## 2.1 Introduction

The U.S. integrated carbon-steel sector has been one of the most common recipients of trade protection in America during the past twenty-five years. The industry's political strength has been demonstrated through the increasingly protectionist steel import regimes obtained in 1969, 1974, 1977, 1982, and 1984. These incidents are noteworthy in that each represents an import barrier outside of the normal U.S. import relief apparatus of escape clause and unfair trade petitions. They included, in particular, comprehensive voluntary export restraints and minimum import prices.

The main source of this political strength was the cohesive coalition of vertically-integrated carbon-steel producers, the steelworkers' union, and members of Congress from steel-producing regions. The cohesiveness of this "steel triangle" arose out of the technology and market structure of traditional integrated steel making. These factors included economies of scale of large-scale production, geographical concentration of plant sites, and the relative immobility of capital and labor employed in the traditional steel sector. They combined to create an industry of few firms, of workers possessing strong incentives to retain their jobs, and of politicians representing communities entirely dependent on steel.

Another factor that contributed to steel industry political effectiveness was the relative lack of cohesiveness among domestic interests opposing steel protection, in particular steel-using manufacturing industries. This highly diverse set of consumer industries has had little in common besides using steel as an input. Consequently, coalitions of steel users opposing protection have been ineffective, with one notable exception in 1989.

Michael O. Moore is associate professor of economics and international affairs at George Washington University.

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The other critical aspect of the industry's success in procuring special protection was the very real possibility of obtaining tariffs through the U.S. antidumping and countervailing duty laws. Securing these duties has been a credible threat because of the widely acknowledged presence of massive foreign government steel subsidies, especially in Europe. The U.S. industry, therefore, could use the threat of legal import protection from such subsidies according to U.S. law. Since antidumping and countervailing duty orders are open-ended and extremely controversial abroad, successive U.S. presidential administrations were willing to head off their final imposition by negotiating special measures, especially voluntary import restraint agreements (VRAs).

Despite the series of successful attempts to obtain extraordinary import regimes, there is evidence that the U.S. integrated steel sector's ability to influence U.S. import may be waning. The outcome of the struggle to extend a steel VRA in 1989 is the first evidence of the diminished influence. The industry was forced to accept a much less restrictive import regime than that for which it had lobbied. The second piece of evidence occurred in 1993. Rather than lobby for and obtain a special import regime, the industry relied exclusively on administered protection (AP) procedures after the lapse of the VRA in 1992. This reliance suggests that the industry could not force the president to offer a special trade regime. In the end, this effort to obtain permanent antidumping and countervailing duties was of such limited success that the industry in 1994 faced the most liberal steel trade regime in over twenty-five years.

The loss of political clout is a consequence of changes in the factors that earlier had led to the sector's political cohesiveness. These changes include the rapidly evolving market structure in the United States, in particular the growing importance of a large number of nonintegrated steel producers known as "minimills." These firms have very different technological attributes and hence interests different from integrated firms. The growth of minimills has also resulted in a geographical dispersion of steel making in the United States which also lessens the political concentration of the industry. Second, the integrated sector's clout has been lessened too by the absolute drop in the number of steelworkers and hence the number of voters particularly interested in steel issues. Third, many years of intense import and domestic minimill competition has meant that the integrated producers have become much more efficient. This in turn undercuts the industry's call for special protection. Finally, the integrated sector increasingly has been confronted with an organized group of steel-using firms that provide a counterlobby to calls for special trade protection.

The aim of this paper is twofold. The first is to recount and explain the past success of the industry in obtaining special import regimes. The second is to consider how these factors have changed over the last fifteen years and how this change will likely affect the industry's clout in the future.

#### 2.2 Steel Trade Policy: 1969 to 1984

The U.S. steel industry held a predominant position in the world in the early postwar period. Like many other manufacturing industries, the U.S. steel producers were the world's technological leaders as well as the largest producers and exporters. During this period, the industry generally supported trade liberalization as a means to open up export markets for U.S. steel products.

The U.S. steel industry's predominance began to wane during the 1950s as Europe and Japan became important producers. This new presence was a consequence both of a rebuilt industrial capacity as well as the result of an activist government industrial policy. The Japanese steel industry in particular was given extensive early government assistance to create an export industry, much of which would eventually find its way to the United States. Government sponsorship of the steel industry also occurred in some European countries, most notably in Italy, Great Britain, and France.<sup>1</sup>

U.S. producers' competitive position was also undercut by their having installed new "open-hearth" capacity in the 1940s, before the basic oxygen furnace, a major technological breakthrough, became widely available in the 1950s. Thus, new foreign capacity, especially in Japan, utilized a new technology that significantly reduced production costs.<sup>2</sup>

Nonetheless, the United States became a net importer of steel only in 1959 when a bitter 116-day steel strike caused U.S. steel users to turn to foreign sources for a stable steel supply. During the 1960s, high U.S. steel prices, continuing labor strife, aggressive foreign government support of its steel industries, and technological disadvantage led to a surge in imports from 7.3 percent of the U.S. market in 1964 to 16.7 percent in 1968 (AISI, various issues).

This growing import pressure led to what then was unprecedented cooperation between steel producers and the United Steelworkers (USW). Despite the history of intense and often violent labor-management strife, integrated producers and the USW joined forces to press for import restrictions during the late days of the Johnson administration. This effort was successful and in 1969 the executive branch negotiated the first of many voluntary restraint agreements with the European Community (EC) and Japan.

The VRAs, however, provided only limited import protection since they restricted only EC and Japanese imports and did not specify the product mix. Consequently, the VRA led both to an upgrading to higher value-added products by EC and Japanese exporters and to an increase in exports from noncovered exporters.

This quota regime lapsed in 1974 as high demand and high prices in other markets diverted steel imports from the United States.

- 1. See Howell et al. (1988) for details.
- 2. See Gold et al. (1984).

The next episode of protection occurred following the 1974 and 1975 recession. This recession was accompanied by a fundamental drop in the growth of world steel demand. Unfortunately, both U.S. and foreign producers interpreted the downturn in steel demand as part of a normal business cycle and continued to add new capacity.<sup>3</sup> When it became clear in the mid-1970s that the slowdown in steel demand growth was permanent, steel producers and governments all over the world were forced to cope with excess production capacity.

One consequence of world excess steel capacity was an increase in exports to the U.S. market. As table 2.1 shows, the volume of imports continued to grow in the United States through the mid-1970s even as U.S. steel consumption dropped.

U.S. producers and the USW argued that these increased imports were a result of the unfair practices of Japanese and European producers. In particular, charges were leveled that the steel imports were dumped into the United States at prices less than fair value. Both U.S. firms and the steelworkers' union argued that profits from the protected Japanese market allowed Japanese producers to lower prices in the United States and gain market share. The U.S. industry argued further that the massive subsidies by European nations with publicly owned steel firms (especially in France, the United Kingdom, and Italy) also resulted in unfairly priced imports. Both producers and the USW maintained that quantitative restrictions were necessary to prevent unfair imports into the United States.

Congressional allies of the integrated sector from steel-producing communities formed the Congressional Steel Caucus in the late 1970s to press the steel industry's case for strict import quotas. This caucus was bipartisan in nature and reflected the geographic concentration of the industry in the industrial heartland of traditional U.S. manufacturing.

The Carter administration, fearing that executive branch passivity might result in a congressionally mandated quota, urged the industry to file dumping cases under the revised antidumping rules in the Trade Act of 1974 (Crandall 1981). The industry followed this advice and filed a host of unfair trade cases in 1977. The Carter administration responded by fashioning a compromise which would avoid both quotas and final dumping duties. The compromise, known as the Trigger Price Mechanism (TPM), established a minimum import price based on a "trigger" price calculated from the production costs of the Japanese steel firms (then considered the world's low-cost suppliers). Any steel imports sold below this price would initiate an automatic antidumping investigation by the government. In return, the industry agreed to forego filing any new antidumping petitions.

Foreign producers were willing to cooperate in this system since, on the one hand, they would be better able to judge what was "acceptable" competition.

<sup>3.</sup> For example, Japanese gross steelmaking capacity expanded from 138 million metric tons in 1974 to 157 million tons in 1979, while European Community (EC) capacity increased from 178 million metrics to 203 million tons in 1979 (World Steel Dynamics 1994).

Year	Steel Imports	Import Market Share (%)	Total Steel Production	Apparent Final Steel Consumption	Steel Sector Employment (thousands)	Real Domestic Steel Sales (billions of 1982–84 \$)	Steel/GDP
1960	3.3	4.7	99.2	71.5	572	48.0	0.036
1964	6.4	7.3	127.1	87.9	555	52.9	0.038
1968	17.9	16.7	131.4	107.6	552	53.4	0.038
1974	13.4	15.9	145.7	119.6	512	77.5	0.037
1977	19.3	17.8	125.3	108.4	452	65.5	0.031
1981	18.9	19.8	120.8	105.4	391	47.4	0.027
1982	16.6	21.8	4.75	76.3	289	29.2	0.020
1984	26.2	26.4	92.5	98.9	236	28.9	0.024
1989	17.3	17.9	97.9	102.7	169	25.4	0.021
1990	17.1	17.5	98.9	97.5	164	23.4	0.020
1991	15.8	17.9	87.9	88.3	146	19.7	0.018
1992	17.1	18.0	92.9	95	140	18.9	0.018

#### Table 2.1 U.S. Steel Industry in the Domestic Economy (millions of tons unless otherwise noted)

Sources: American Iron and Steel Institute, Annual Statistical Report (various issues); Economic Report of the President (1993).

\*Steel/GDP = million tons of steel consumption/billion \$GDP (1987 prices).

Secondly, the TPM created a price floor based on low-cost producers which guaranteed high-cost European firms significant profits in the United States.

The system was attractive to the U.S. industry since it applied to *all* imports. Thus, the TPM discouraged trade diversion to other sources, unlike the 1969 VRA. However, upgrading by exporters to higher valued-added products was still possible and high cost producers could still "dump" their products as long as they charged above the trigger price.

Despite the respite from price competition created by the TPM, the integrated steel sector in the United States began in the 1980s with major competitive problems. In 1981, the U.S. steel sector continued to use decades-old open-hearth furnace technology in 36.5 percent of its operations, compared to 4.1 percent and 26.3 percent in Japan and the EC, respectively. Use of modern continuous casting techniques followed similar patterns: 20.3 percent in the United States versus 70.7 percent in Japan and 44.9 percent in the EC (International Iron and Steel Institute 1991). High labor costs were also an important problem for U.S. firms. Average unit labor costs for U.S. steel firms in 1979 were \$162.7 per ton while Japanese rates averaged around \$49.8 and Thyssen of Germany averaged \$111.1 per ton (World Steel Dynamics 1990). Contributing factors to the high labor costs included outdated physical capital, rigid work rules, and wages that had risen under the Experimental Negotiating Agreement of 1974, which guaranteed a 3 percent nominal pay increase plus a full cost-of-living adjustment (regardless of productivity increases) in return for an agreement not to strike.

The U.S. industry was therefore ill equipped to cope with a major downturn and a renewal of intense international competition. The onset of the deep recession in 1981 and 1982 was nearly catastrophic for the U.S. industry. Operating profits for all steel firms fell to a loss of \$3.38 *billion* in 1982 while total steel sector employment dropped sharply from 391,000 in 1981 to 289,000 in 1982, or nearly 25 percent. Import market share rose to 21.8 percent in 1982, thereby exceeding 20 percent of the U.S. market for the first time in history. This increased market share occurred despite the continued operation of the TPM. However, it is important to note that this overall increase in import share mainly reflected a precipitous drop in domestic consumption since the absolute level of all imports *fell* from 18.9 million tons to 16.6 million tons in the same period.

Despite the drop in import volume from all sources, the volume of European steel imports into the United States did increase substantially. This increased European production was in part possible because of the operation of the Davignon Plan in Europe, which prescribed internal European production quotas and allowed for some countries to provide operating subsidies to ease the adjustment costs of reduced employment. Much of the resulting surplus production was then exported, much of it to the United States.

The U.S. integrated industry therefore pointed to Europe, and especially

the effects of government subsidies, as the main source of its difficulties. The combination of increased exports from the EC and massive losses in the U.S. steel industry induced U.S. producers to force the end of the TPM by filing sixty-one countervailing duty (CVD) and thirty-three antidumping (AD) duty petitions against eight countries of the EC, as well as Brazil and Romania.

The cases reached their first important juncture when the International Trade Commission (ITC) ruled affirmatively in twenty of the CVD cases and eighteen of the AD petitions at the preliminary stage. If final duties were implemented the result would have been potentially very chaotic for the EC since some nations would have been exempted from duties, and those that did receive punitive tariffs would be charged with widely varying rates based on the individual dumping and subsidy rulings of the Commerce Department. This divergent treatment for EC exports would have meant a closed U.S. market for a subset of European exporters, which, combined with a barrier-free intra-EC market, would have meant massive trade diversion within Europe.<sup>4</sup>

Had the Reagan administration allowed the AP process to continue to the final stage, it was very likely that open-ended and prohibitive duties on a subset of European steel exports would have been forthcoming. The Reagan administration also knew that many of the EC countries were providing subsidies to forestall possible major social unrest.

The Reagan administration, fearful of strained relations with the EC, agreed to enter negotiations with the EC for a new VRA. The agreement, finally reached in October 1982, limited EC exports to 5.5 percent of the U.S. market. In return, the U.S. firms dropped their unfair trade petitions and agreed to refrain from filing new cases against EC nations until the agreement expired in January 1986.

The agreement provided two important benefits to the U.S. industry. The VRA both allowed U.S. firms to avoid further AP litigation costs and provided protection against all EC imports rather than against only a subgroup, thereby avoiding some supply diversion. The VRA was also clearly preferable to the Europeans since it permitted them to continue to export and also prevented a major intra-European dispute.

The respite for the integrated industry was short-lived, however. As with the 1969 VRA, nonrestricted exports rapidly filled the void created by the fall in EC exports. Despite the VRA, imports from all sources rose slightly in 1983 to 17.1 million tons, although, with the recovering economy, the import market share actually fell to 20.5 percent.

Further complicating the industry's position was the start of the dollar's spectacular rise in value.

4. These diverse duties were in large part a reflection of the extremely dissimilar EC steel policies, with a subset of nations (Belgium, Italy, Great Britain, and France) providing substantial operating subsidies to their public owned steel firms while other nations with private steel firms (the Netherlands and Germany) were more laissez-faire in approach. Integrated firms, severely disappointed by an import share still exceeding 20 percent, once again began to prepare trade cases. This time the USW and Bethlehem Steel filed an escape clause cause in which the ITC would rule on the presence of "serious" injury to the entire industry. If an affirmative ruling was forthcoming, President Reagan would be forced to rule on the case in September 1984, less than two months before the presidential election.

Simultaneously, Congressional Steel Caucus members prepared legislation imposing an across-the-board 15 percent quota on imported steel, an import share last seen in 1976. The congressional hearings for the bills were completely dominated by the steel sector and its supporters. Steel-using industries did provide some testimony in opposition but their lobbying efforts were extremely limited.

In July the ITC ruled that only five of the nine constituent steel "industries" were eligible for import relief. The ITC did find, however, that the industries producing pipe and tube, bar, rod, and rails were injured because of domestic competition, much of it from so-called minimills, rather than from import competition. Indeed, the ITC pointed out that minimills had consistently undersold both imports and integrated mills yet still remained profitable for the previous three years (ITC 1984, 47–54).

Rather than reject all import relief or impose barriers on only five steel sector categories as recommended by the ITC, the Reagan administration decided to negotiate a new global VRA. The plan, scheduled to expire in 1989, limited imports of finished steel to 18.4 percent of the domestic market. Even more important to the domestic industry was that the quota was on a *product*- and *country*-specific basis and that the agreement essentially covered all important steel exporting countries. Thus, the industry obtained a program that helped alleviate product upgrading and supply diversion, both of which had been major drawbacks of earlier VRAs and the TPM.

The 1984 VRA program was a major political victory for the integrated sector. Not only had the industry secured its most important long-term trade goal, namely, a comprehensive quota covering nearly all products and all exporting countries, but it also had wrested this outcome from Ronald Reagan, a distinctly market-oriented president.

# 2.3 Sources of Steel Industry Political Strength

The steel industry's ability to obtain increasingly protectionist import regimes arose from three factors. The first was the industry's political cohesiveness, which resulted from technological factors in the steel industry. The second was the legal import restrictions available to the industry. These options created a credible threat to use unfair trade remedy procedures to obtain discriminatory tariffs on import steel. Finally, the industry's sheer size resulted in important ballot box power.

#### 2.3.1 Technology and Coalition Cohesion

Critical to the steel industry's success was the close cooperation of producers, workers, and politicians from steel-producing communities. These groups willingly worked together so closely largely because of the technology of integrated steel making. In particular, the large scale of an efficient steel mill, the geographical concentration of production, and the relative immobility of labor and capital within the industry all combined to provide strong incentives for all three groups to cooperate.

Integrated steel making involves transforming iron ore and coal into final products at one plant site. An integrated plant includes coke ovens, blast furnaces, basic-oxygen or open-hearth furnaces, a casting process, and rolling equipment. These technologies, especially coke ovens and blast furnaces, require a very large scale of operation. Thus an efficient integrated plant will employ thousands of workers and require enormous capital outlays. For example, the minimum efficient scale of a new integrated plant is about 7 million tons of capacity per year. An efficient new steel mill therefore represents about 7 percent of total U.S. annual steel consumption (Barnett and Crandall 1993).

The high costs of transporting iron and coal were a strong incentive to locate near these raw material sources; as a result, integrated steel operations are usually highly geographically concentrated. For example, in 1965 approximately 54 percent of U.S. steel capacity was located in Pennsylvania, Ohio, and Indiana (AISI 1969).<sup>5</sup>

The combination of large scale operations and geographical concentration had important consequences. High fixed costs meant a difficult entry into the integrated sector; the number of integrated firms therefore remained relatively low. Furthermore, large fixed costs translated into strong incentives for firms to maintain high capacity utilization rates. Firms would therefore often sell below average total costs in times of slow demand—the incentive for aggressive pricing behavior was ever present with integrated firms. These incentives created strong pressures for firms to act together to limit price competition through cartels and price setting. These two factors led to an oligopolistic market structure in the United States as well as in many other countries.

In terms of political lobbying, the small number of firms meant that there was little chance for a single integrated firm to get a free ride on lobbying efforts by other firms; shirking on lobbying efforts was easily detectable. Thus the American Iron and Steel Institute, the trade association of integrated steel makers, was composed of actors who knew each other well and could monitor contributions to lobbying efforts. The resulting cooperation was further enhanced by shared economic interests; integrated firms thus tended to speak with one voice on many public policy issues, including trade, environmental, and labor questions.

5. This pattern was repeated in the United States (e.g., Pittsburgh), in the United Kingdom (e.g., Manchester), and in continental Europe (e.g., Lorraine, Luxembourg, and the Ruhr valley).

The large scale of operations and geographical concentration also meant that integrated plants could easily dominate the economic life of a region, for example, Gary, Indiana, and Pittsburgh, Pennsylvania. Local political leaders were therefore very interested in cooperating with the integrated producers on lobbying efforts.

Workers in the industry also tended to have strong incentives to work for import protection. This arose out of two factors. First, the tendency for integrated works to dominate a region's economy meant that workers who lost their jobs in the steel mill might have few alternative employment opportunities. Second, since the advent of collective bargaining in the steel industry after World War II, the USW has managed to secure relatively high wages, nearly double the average manufacturing wage. These high wages were particularly attractive since many steel industry jobs have traditionally been relatively unskilled though often quite dangerous. Since the industry was organized almost exclusively by the USW, labor also had an effective single voice to contribute to policy debates.

The relative stability of the actors—the same producers, the same union, the same congressional districts—meant that those involved in lobbying for steel sector protection were well-known to each other. This helped create reputations for cooperation and enhanced coalition solidarity. The single voice and shared interests also meant that the steel sector could share lobbying costs either explicitly through joint press conferences, for example, or implicitly through canvassing congressional members or executive branch officials.

The relative influence of the united steel coalition was further enhanced by the highly varied nature of the steel user. These industries, whose only shared interest is the use of steel as an input, generally found it very difficult to cooperate on steel import policy. All of the advantages of the steel sector (common economic interests, small number of firms, and stable actors) have traditionally been entirely absent among steel users.

Probably the most striking examples of the cooperation among the producers, the steelworkers' union, and political representatives can be found in congressional hearings about steel import policy. Testimony before Congress in 1984 for the 15 percent quota bill, for example, showed the near complete solidarity of steel producers, the United Steelworkers, and local politicians. Indeed, the only major controversy among steel interests in 1984 was whether firms should be forced to reinvest profits from their steel operations back into worker retraining and modernization efforts. (The USW strongly supported both of these requirements while the industry generally was fiercely opposed.)

## 2.3.2 Trade Remedy Law Advantages

Another critical aspect of the U.S. industry's success at obtaining protection has been its credible threat of obtaining antidumping or countervailing duties on imported steel. This credibility arises out of technical legal aspects of the unfair trade remedy laws as well as out of the widely acknowledged level of government steel sector intervention in many countries.

Technical aspects of the unfair trade laws that worked to the steel industry's advantage are numerous. Indeed, in the United States the steel industry has by far been the most frequent petitioner in antidumping and countervailing duty petitions.

The first advantage for the steel industry is that the cases are adjudicated on a product- and country-specific basis. This means that each country and each firm may receive widely varying duties. This translates into the possibility that some firms and countries can be completely frozen out of the U.S. market while others can freely come in.

This was particularly important for the steel industry, wherein a myriad of products are imported from many countries. The industry could then argue that because the administered protection procedures would lead to chaos in the industry, comprehensive special import regimes should be used instead.

The unfair trade procedures were also attractive to the steel industry as a means of forcing the president to negotiate special trade agreements. The reason is that the unfair trade remedies are quasi-judicial, bureaucratic, and rulesoriented. In particular, the ITC rules on the presence of "material" injury at a preliminary and final stage while the Commerce Department rules on the existence and size of dumping or subsidy margins. If both agencies rule affirmatively on the petition, duties are assessed on imports that are firm- and countryspecific. These duties have no set time limit. Consequently, the president has no role to play whatsoever in the formal adjudication of these petitions so that foreign policy or national security concerns are totally absent from the decision process.

The combination of these factors has meant that a number of different presidents have faced the possibility of widely varying and high duties placed on important U.S. allies. Since these duties are potentially prohibitively high and open-ended, the political price for allowing them to be imposed has encouraged administrations to negotiate quotas before the duties become final dumping and countervailing duty orders.

The use of antidumping and countervailing duty petitions would not be important, however, without foreign practices which can make positive dumping and subsidy margins very likely. On the one hand, subsidy margins are highly likely since many nations have subsidized their steel industries—in Europe, as a means of slowing employment losses, and in the developing world as a means of industrial policy.

Positive dumping margins are also highly probable because of the incentives (explained in section 2.3.1) to price below average total costs in times of recession. In addition, since the Commerce Department uses "fully-allocated-costs," that is, average total costs, in its production costs calculation, the legal rules for calculating dumping margins will work toward positive dumping margins, especially if recessions occur concurrently across the world.

#### 2.3.3 Ballot Box Strength

The political power of the industry has also been enhanced by the sheer number of potential voters in the industry. In 1974, for example, there were over half a million Americans directly employed in the steel industry. In addition, the concentration of these workers in relatively localized geographical regions meant that steel interests were particularly important in elections for the House of Representatives. Thus the industry has been able to marshal the political support of a major part of the congressional delegations of West Virginia, Pennsylvania, Ohio, and Indiana. These congressional members have a common interest in steel import policy and have been able to pressure the entire Congress to help the steel industry. The large number of workers in each of these states also meant that senatorial candidates and senators had strong incentives to support the industry.

The concentration of these workers in populous states with many electoral votes (e.g., Pennsylvania, Ohio, and Indiana) has translated into importance in presidential politics as well. The most notable example is the 1984 filing of an escape clause petition that forced President Reagan to confront steel import policy just weeks before the election.

#### 2.4 The 1989 VRA Renewal Campaign

The VRA program announced in 1984 was set to lapse in 1989. This, the Reagan administration had hoped, would prevent the steel industry from bringing pressure to bear on the next presidential campaign. However, in the late summer and early fall of 1988, Republican presidential candidate George Bush was significantly behind Michael Dukakis in the polls. Governor Dukakis had already pledged support to a renewal of the VRA.

As part of the general effort to coordinate a come-from-behind victory and to help solidify political support among "Reagan Democrats" in the steel region, the Bush campaign agreed to support a VRA extension but did not outline any specifics about the timing and details of the proposed program.

Soon after the inauguration, posturing began over the extension's exact details. The usual array of actors lined up in favor of the VRA extension. The bipartisan Congressional Steel Caucus, the integrated firms' trade association (AISI), and the steelworkers' union reassembled the coalition that had been so successful five years earlier. The main goals of the steel industry and its allies were to push for a five-year extension of the existing program, with the inclusion of nonparticipating nations (Canada and Sweden) into the extended VRA.

However, unlike earlier steel import policy debates, steel users for the first time were well organized to counter the steel industry's position. In particular, the Coalition of American Steel-Using Manufacturers (CASUM), headed by Caterpillar Inc., argued that the president should terminate the VRA program because (1) steel-using firms provided much more employment than steelproducing firms and the VRAs hurt U.S. exports; (2) the steel quotas had increased prices and led to spot shortages, especially for firms using modern inventory management techniques ("just-in-time" delivery); (3) the steel industry should rely, like virtually all other domestic industries, on the established administered protection procedures to address their trade complaints; and (4) the high steel sector profits in 1988 and improving domestic steel industry competitiveness were evidence that the domestic industry did not deserve special help.

The overall strategy of CASUM was to turn the debate away from the actions of foreign firms and governments toward the VRAs' effects on United States manufacturing interests. CASUM also appealed indirectly to protectionist elements in Congress by emphasizing that VRAs rewarded unfair traders through the transfer of profits earned in the protected U.S. market. The coalition also made a concerted effort to identify steel-using firms in the districts of Congress members who had supported the steel industry in the past. This helped provide constituent counterbalance to the votes of the steel-producing industry.

In the final analysis, the VRA was continued as candidate George Bush had promised, but it was a far cry from the program backed by the industry. In particular, the new program granted a two-and-a-half-year extension (rather than five years), loosened the market share of the quota by a 1 percent *increase* per year (instead of tightening the quantitative restrictions), and liberalized the short-supply provisions (rather than maintaining the status quo). In short, the 1989 VRA extension was a major disappointment for the integrated industry and a major victory for the steel-using industries.

The actual experience of the VRA in the post-1989 period strongly suggests that not only was the program less than what the integrated firms wanted, but that the quotas may have had very little effect on the domestic steel market. In particular, the quotas were not filled on a country or product basis for most of the post-1987 period.

The quotas were binding or nearly binding for most of the first two years. However, beginning in 1988, the overall quota fill rate fell from 79 percent to a low of 54 percent in the last three months of the VRA in 1992. In addition, subsequent to the extension in October 1989, no country filled its overall quota and in only one instance (Finland in the October–December 1990 period) did imports reach over 90 percent of the quota limits. This pattern is repeated for individual product categories. After 1988, the quotas were binding or near binding only in some speciality products—alloy tool steel, tin plate, and stainless steel plate and sheet.<sup>6</sup>

The other major aspect of the Bush administration's steel policy was the multilateral steel negotiations conducted parallel to the VRA program. The Bush administration hoped that a Multilateral Steel Agreement (MSA) would eliminate the underlying problems that had bedeviled steel trade for twenty

<sup>6.</sup> For a detailed list, see Moore (1996).

years, especially global overcapacity, tariff and nontariff barriers, and tradedistorting practices such as dumping and subsidies. The entire industry strongly supported this effort. Indeed, a multilateral solution to steel problems had long been the principal long-term public policy goal of all members of the domestic steel industry, including the USW, the integrated producers, and minimills.

As the April 1992 demise of the VRA program approached, the Bush administration held fast to the position that all quantitative restrictions *permanently* end on April 1. Surprisingly little support emerged in the steel industry for another extension of the VRA program. Only the United Steelworkers, Bethlehem Steel, and the specialty steel sector publicly supported an extension of the quotas. The balance of the integrated industry, extremely disappointed in its experience with the VRA after 1988, expressed no interest whatsoever in an extension.<sup>7</sup> Instead, the steel firms announced repeatedly that they would file another round of antidumping and countervailing duty petitions, but this time they vowed to pursue them to final decisions. In other words, the industry threatened that it would try to obtain the definitive AD and CVD duties that would provide significant and lasting protection.

In the event, the VRA program expired on April 1, 1992, and the multilateral steel negotiations ended with no agreement. As promised, the Bush administration refused to take special action and, also as promised, the steel industry filed over eighty antidumping and countervailing duty petitions in the summer of 1992.

The superficial parallels to 1984 are striking. Once again a free-tradeoriented Republican president faced reelection while a torrent of steel industry AP petitions wound through the bureaucracy. Further complicating the political calculus was that Bush faced both a weak economy and a much more formidable opponent in Clinton than Reagan had faced with Mondale in 1984. Indeed, many veteran industry observers fully expected that the administration would be forced to reach an accommodation with the steel industry before the AP process worked to a conclusion.<sup>8</sup> The implicit assumption, of course, was that high final antidumping duties were near certain and that the administration would be unwilling to allow them to be imposed. These expectations for a negotiated outcome grew even stronger as the polls continued to show President Bush lagging behind Governor Clinton.

If the steel industry wanted to use the AP petitions to inject steel policy into the 1992 presidential campaign, they failed utterly. President Bush held firm to his pledge not to extend any special deals to the industry.

<sup>7.</sup> The integrated firms' *private* position insistence is somewhat in dispute. Steel producer representatives argue that the firms had no interest in an extension. However, an official at the Trade Representative's office insists that the industry was in favor of extension until December 1991, when it became clear that the Bush administration would not grant it.

<sup>8.</sup> For example, see the comments of long-time steel editor George McManus in *Iron Age*, May 1992.

With the election of Bill Clinton, a politically powerful integrated steel industry might have used the opportunity to force steel import policy into policy avenues with political discretion and away from the administered protection process. Instead, the industry pressed ahead with the AP petitions.

The cases proceeded to the ITC for a final ruling on material injury. On July 27, 1993, the ITC ruled affirmatively on thirty-two cases and negatively on forty-one petitions, which translated into roughly half of the imports in value terms. The majority of the ITC's members concluded that dumped and subsidized imports were not important causes of domestic problems in the industry. Instead, the majority of the ITC reasoned that price competition among domestic firms was the main source of difficulty and pointed out that imports were sold at prices that were often *higher* than domestic sources (ITC 1993). In other words, the ITC found strong evidence that the domestic steel industry was increasingly prone to intense *domestic* price competition—the fragmented nature of the "new" U.S. steel market made oligopolistic price discipline very difficult to maintain.

In sum, the spotty protection (final high duties placed on some countries' products and all provisional duties removed on others) meant that the integrated industry could count on very little significant comprehensive protection from these cases. The duties' lasting effect will depend in large part on whether countries not covered by final duties will step in to replace the displaced imports. If they do so, the domestic price effects of the duties may be minimal.

For the first time in about twenty-five years steel had clearly and publicly lost a major trade policy debate. The industry's most important trump card, the threat of final and near-prohibitive dumping and countervailing duties, had been played and little had come of it. While the industry was able to raise prices and garner significant short-term increases in profits during the period of provisional duties, the strategy did not lead to permanent *comprehensive* protection.

#### 2.5 The Changing Nature of Integrated Steel Sector Influence

The integrated steel industry clearly was not as successful in influencing trade policy in the post-1989 period. The reasons for that diminished influence are directly related to changes in the industry's sources of strengths, mentioned in section 2.3 above.

# 2.5.1 Technological Evolution in the Carbon Steel Industry

The most important changes are without question in the evolving technology and market structure of the carbon steel sector. In particular, the spectacular rise in the minimill sector and the increasing importance of "reconstituted" mills have seriously undercut the cohesion of the traditional steel-industry lobbying coalition.

Minimills do not produce raw steel but instead melt steel scrap using high-

temperature electric arc furnaces (EAFs). The molten steel is then cast and rolled to produce final steel products in a fashion similar to an integrated mill. However, unlike many older integrated mills, the minimills' recent emergence means that they use continuous casting techniques almost exclusively.<sup>9</sup> Because minimills do not use coke ovens or blast furnaces, the minimum efficient scale for an EAF is around 1 million tons were year instead of 7 million for an integrated plant. Since minimills are not dependent on iron ore and coal, they can establish plants near the end market. Minimills also typically have more flexible work rules and incentive-based pay, which reduces unit labor costs for both their nonunion and union work forces.

So-called reconstituted mills also have played a much more prominent role in the steel sector. These firms arose as the integrated companies sold individual plants to reduce costs and as some established firms declared bankruptcy. The resulting firms, including Weirton Steel and Gulf States Steel, have become increasingly competitive with the established integrated firms.

The success of the minimills in the U.S. market has been remarkable. Minimill shipments rose from 7 percent of the U.S. domestic market in 1979 to 24 percent by 1991. Reconstituted mills, essentially nonexistent in 1979, controlled 25 percent of the domestic market in 1991.<sup>10</sup>

The most important consequence of this more fragmented steel sector is that the traditional cohesion of the industry has largely been dissipated. This has manifested in a number of ways. First, the large number of firms makes price discipline so much more difficult that the oligopolistic power of the integrated firms has largely disappeared. The dramatic drop in entry and exit costs means that the U.S. steel sector is much more similar to the textbook example of a competitive market. Second, the rising importance of minimills means that steel production is much less geographically concentrated. Third, the radically different market structures of the new entrants mean that the industry's members do not necessarily share the same positions on steel policy issues.<sup>11</sup> The most important example of such dissension is that of Ken Iverson, CEO of Nucor Steel. Iverson is an impassioned free trader and has often spoken out against steel protection.<sup>12</sup> Finally, the success of the minimills vis-à-vis both

9. For a comparison of minimill and integrated mill production techniques, see Hogan (1987). 10. Moore (1996).

11. One recent example concerns the health care reform effort in 1994. Many integrated firms, with large numbers of retired workers, were outspoken in their support of the "employer mandate" requiring all firms to contribute to health care. Minimill firms, with a younger workforce and less generous benefits, were much more reluctant to support such changes. Other examples of differences involve environmental and energy policy. Minimills are not affected by the air pollution control costs of coke ovens, and integrated mills are less sensitive to electricity price reform.

12. Mr. Iverson spoke out strongly against any trade protection during congressional hearings in 1984 and asserted that "we believe that tariff or nontariff trade barriers will delay modernization of our steel industry, [and] will cost the consumer billions of dollars." Instead, he argued that the government could offer assistance in retraining programs and various special tax credits directed specifically at the integrated sector (House Ways and Means 1984, 288–89). integrated domestic mills and imports has undercut the argument of the integrated sector to point to imports as the source of any economic difficulties.

## 2.5.2 Changing Voting Strength

As the industry has changed over the last fifteen years, the voting strength of the industry has diminished.

The most obvious change is the absolute drop in the number of steel sector employees. Total steel sector employment has fallen from 572,000 in 1960 to 236,000 in 1984, and in 1992 was only 140,000. In addition, these employment drops have been concentrated in the northeast, where electoral votes have dropped concurrently as the population has migrated to the southern and western United States. These two factors together mean that steel industry concerns are much less important in presidential campaigns.

The changing local character of steel sector production has been important at the congressional level as well. As many of the integrated mills have been closed, fewer and fewer congressional districts have a large number of steelworkers dominating the economic life of a region. This translates into fewer members of Congress who will likely fight aggressively for import restraints. The concurrent rise in minimills has meant that more and more smaller steel firms are geographically dispersed. This may mean that more congressional districts have an active steel industry presence, but the political importance of a three-hundred-worker minimill and a two-thousand-worker integrated works are hardly comparable. In addition, the small entry and exit costs of a minimill mean that if a firm closes it is much more likely to resume operation than if a large integrated plant is idled.

#### 2.5.3 Trade Remedy Laws: The Future of Steel Protection

Integrated firms may become even more aggressive in pursuing antidumping and countervailing duty orders than in the past, especially if foreign governments continue to artificially support their industries, making a successful AD or CVD petition likely.

However, if the integrated industry pursues these petitions to final decisions, as in 1993, this will be a sign of political weakness, not of strength. The nature of the trade remedy laws means that even politically weak industries have full legal access to the process. Pursuit of final unfair trade duties thus will mean that integrated firms will be relying on the quasi-judicial and nonpolitical part of the U.S. trade policy apparatus rather than using their clout to obtain special import regimes.

The industry also may devote considerable resources to changing the technical details of unfair trade remedies. Examples in the 1990s have included lobbying for retaining the principle of "cumulation" in material injury decisions, changing the rules on captive imports, and continuing to press for an outright ban on all subsidies to foreign steel firms. Even if the integrated firms are more successful in the future at obtaining unfair trade remedies, they still will face intense competition from domestic minimills. This is likely to be true even in flat-rolled products, long a source of competitive strength for the integrated mills. Indeed, technological changes over the last five years in thin-slab casting and scrap-replacement iron sources will make minimills increasingly important in the high value-added sector as well.

#### 2.6 Conclusion

The U.S. integrated steel sector has long been one of the most important and successful proponents of import protection. The industry's success at obtaining special import quotas has been rivaled only by the textile and apparel industry.

Despite past successes, fundamental and profound changes in the technology and market structure of the industry point to a diminished steel sector political influence. Most important, the spectacular growth of minimills has created a much more fragmented steel industry. The industry has become and will likely continue to be less geographically concentrated, with fewer workers and more firms. All of these factors work to create more competition within the domestic market. This in turn makes effective coalition building more complicated and lobbying efforts less cohesive. In short, the days of the integrated firms' ability to wrest special import regimes from reluctant presidents may be over.

Ironically, the weakened political strength of the industry has been accompanied by a substantial improvement in the international competitiveness of the U.S. steel industry. Not only have minimills arisen as efficient producers of many steel products, but integrated firms themselves have undertaken substantial modernization and restructuring efforts. Labor as well has done its part by agreeing to a number of painful concessions to improve productivity. Finally, the industry has been further helped by the lower value of the dollar during the late 1980s and early 1990s.

Though the era of comprehensive steel import quotas may be over, a politically weakened, but still politically significant, industry will continue to press its case for protection. Unlike earlier efforts, the industry will likely pursue antidumping and countervailing duty petitions to final conclusions rather than using them as political leverage for quotas.

In short, the decade of the 1980s was pivotal for the U.S. steel industry. The industry began the decade as a barely functioning oligopoly, at the height of its political, if not economic, influence. The restructuring of the decade has yielded a much more competitive industry. This reborn industry, stripped of much of its oligopolistic price discipline and political cohesion, in the future will rely on the normal trade remedy apparatus.

# Chronology of Steel Trade Events

1969	Negotiation of VRAs with the EC and Japan (scheduled to
	last until 1974)
1977	Inauguration of Trigger Price Mechanism for all steel imports
January 1982	Dozens of antidumping and countervailing duty petitions filed against EC countries
October 1982	Negotiation of VRA with the EC (scheduled to last through December 1985)
January 1984	Escape clause petition filed by Bethlehem Steel and United Steelworkers
July 1984	ITC rules affirmatively in the escape clause petition in five out of nine product categories (affirmative: sheet and strip, plate, structural shapes, wire and wire products, and semi- finished steel; negative: pipe and tube, bar, rod, and rails)
September 1984	Negotiation of VRAs on all nine steel products in escape clause petition; market share for participating nations 18.4 percent (set to end in September 1989)
November 1988	Candidate Bush promises to continue VRA
July 1989	President Bush announces Steel Liberalization Program: (a) 2.5 year VRA extension, (b) 1 percent annual increase for countries willing to stop unfair practices (up to 20.9 per- cent by March 1992), (c) Multilateral Steel Negotiations (MSA) begun to remove "trade-distorting" steel practices
April 1992	Termination of VRA; breakdown of MSA over allowable ("green light") subsidies
June 1992	Antidumping and countervailing petitions filed against flat- rolled products
July 1993	ITC rules affirmatively on only a subset of steel industry pe- titions

# References

American Iron and Steel Institute (AISI). Annual statistical report. Various years. Washington, D.C.: American Iron and Steel Institute.

Barnett, Donald F., and Robert W. Crandall. 1986. Up from the ashes: The rise of the steel minimill in the United States. Washington, D.C.: Brookings Institution.

——. 1993. Steel: Decline and renewal. In *Industry studies*, ed. Larry L. Duetsch. Englewood Cliffs, N.J.: Prentice Hall.

Crandall, Robert W. 1981. The U.S. steel industry in recurrent crises: Policy options in a competitive world. Washington, D.C.: Brookings Institution.

- Gold, Bela, William Pierce, Gerhard Rosegger, and Mark Perlman. 1984. *Technological progress and industrial leadership: The growth of the U.S. steel industry 1900–1970.* Lexington, Mass.: D.C. Heath.
- Hogan, William T. 1987. Minimills and integrated mills: A comparison of steel making in the United States. Lexington, Mass.: Lexington Books.
- House Ways and Means Committee. 1984. Problems of the U.S. Steel Industry. Serial 98-93.
- Howell, Thomas R., William A. Noeller, and Alan Wm. Wolfe. 1988. Steel and the state: Government intervention and steel's structural crisis. Boulder, Colo.: Westview Press.
- International Iron and Steel Institute. 1991. *Steel statistical yearbook*. Brussels: International Iron and Steel Institute.
- Moore, Michael O. 1996. Steel protection in the 1980s: The waning influence of big steel? NBER Working Paper no. 4760. In *The political economy of American trade policy*, ed. Anne O. Krueger. Chicago: University of Chicago Press, forthcoming.
- Tsoukalis, Loukas, and Robert Strauss. 1985. Crisis and adjustment in European steel: Beyond laisser faire. *Journal of Common Market Studies* 23, no. 3:207–28.
- U.S. International Trade Commission (ITC). 1984. *Carbon and certain alloy steel products.* USITC Publication no. 15513. Washington, D.C.: U.S. Government Printing Office.
- ——. 1993. Certain flat-rolled carbon steel products from Argentina, Australia, Austria, Belgium, Brazil, Canada, Finland, France, Germany, Italy, Mexico, Netherlands, New Zealand, Poland, Romania, Spain, Sweden, and the United Kingdom. ITC Publication no. 2664. Washington, D.C.: U.S. Government Printing Office.
- World Steel Dynamics. 1990. Core report NN. New York: Paine-Webber.
- ———. 1992. Battle of the minis. New York: Paine-Webber.
- ——. 1994. Core report VV. New York: Paine-Webber.