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The American Steel Industry: A Changing Profile

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Summary

The U.S. steel industry has faced increasing difficulties since the late 1990s. About 40 U.S. steel producers have gone into bankruptcy. While different companies and parts of the industry have been affected to different degrees, the two types of domestic producers of raw steel, integrated mills and minimills, have both supported restrictions on imports, which they say have undermined the ability of the U.S. industry to produce steel economically. U.S. policymakers have responded with a variety of measures, but could not prevent a new downturn in the domestic industry in late 2000 and 2001.

Active and retired steelworkers and their union representatives have also become particularly concerned about the industry's possible inability to continue to fund pension and health care benefit commitments (an issue known as "legacy costs"). Already, more than 100,000 retired steelworkers have lost health care benefits, which were funded by steel companies that have been liquidated. Supporters of government assistance for legacy cost relief introduced legislation, and the 2002 trade bill, approved by Congress and President Bush (P.L. 107-210), assists retirees not eligible for Medicare, who have lost their health care benefits because of corporate bankruptcies. Pensions are guaranteed up to statutory limits by the Pension Benefit Guarantee Corporation, which acted in 2002 to take over the plans of three of the largest integrated steel producers.

Pressed to act by Members of Congress, steel companies, and labor representatives, President Bush in June 2001 requested the U.S. International Trade Commission (ITC) to undertake a new Section 201 trade investigation on the steel industry. The ITC ruled that much of the industry was being injured by increased imports and recommended relief measures to President Bush. On March 5, 2002, the President decided to impose three-year safeguard tariffs with top rates of 30%. The safeguard tariffs were only one element of an Administration strategy concerning steel, which also included a multilateral international negotiations on global overcapacity in the steel industry and future rules for world steel trade. Meanwhile, U.S. trading partners have challenged the Section 201 measures under rules of the World Trade Organization.

Some Members of Congress, economists and representatives of steel-consuming industries have expressed concerns that measures to aid the industry are having a negative impact on the competitiveness of a broad range of U.S. businesses. Supporters of this view in the 108th Congress urged the ITC to give consideration to the impact on U.S. steel-consuming industries in the review of the effects of President Bush's safeguard measures. On September 19, 2003, the ITC produced reports on the effects of the safeguard measures on both the domestic steel industry and steel consuming industries.

This report reviews industry developments and the economic situation of the steel industry, including legacy cost aspects of its problems. It will be updated as events warrant.

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The American Steel Industry: A Changing Profile

Since the late 1990s, the U.S. steel industry has experienced increasing difficulties. Much of the industry has been in serious trouble since the financial crises of 1997-98 in Asia, Russia, and Latin America contributed to a rise in U.S. steel imports. After reactions from the Clinton Administration and Congress, imports fell in 1999 and the domestic steel industry staged a partial recovery by early 2000. However, this recovery was undermined by a renewed rise in imports, by a suddenly slowing domestic U.S. economy, and by the big rise in energy prices that affected the energy-intensive steel industry in 2000. Some commentators also say that there are still too many older, inefficient steel mills that are not competitive with newer, more productive plants here and abroad, and that contracted wage and benefit costs have been obstacles to restructuring, consolidation, and modernization.

Almost 40 steel companies have been in bankruptcy at least at some point in this period. Companies operating under Chapter 11 have included Bethlehem Steel, Republic Engineering, Wheeling Pittsburgh, Weirton Steel and National Steel, all well known as integrated producers, *i.e.*, companies that produce steel from iron ore. LTV, reportedly the third-largest U.S. integrated producer, was liquidated under Chapter 7 of the bankruptcy code, though most of its assets are back in operation under new ownership as the International Steel Group (ISG). Geneva Steel of Utah, the only integrated mill west of the Rockies, has ceased operating and a number of minimills, which generally produce steel from remelted scrap, have also gone out of business. The industry found it difficult to raise the financing necessary for further restructuring and modernization. Also, integrated steel companies have had problems in funding the pension and health care packages to which they agreed for steelworkers and retirees in the 1980s, an issue known as “legacy costs.”

While U.S. policymakers responded to the problems of the industry with a variety of measures, the situation in the domestic industry continued to worsen in 2001. Under increasing pressure from Congress, industry and labor, and after consultations with all three groups, President George W. Bush took action under Section 201 of U.S. trade law. This allows the President to implement temporary trade relief for a domestic industry after an independent finding that it has been injured by surging import levels. Under U.S. law, the presidential request went to the U.S. International Trade Commission (ITC), for an investigation to determine if high import levels are a substantial cause of injury to the U.S. industry. The ITC reported affirmatively that imports are substantially injuring a large part of the domestic industry and forwarded recommendations of relief to President Bush. Although criticized by U.S. trading partners, the President on March 5, 2002, announced a series of three-year remedy tariffs, known as “safeguard” tariffs, of up to 30% on a selected range of steel products.

The Section 201 action, combined with other trade remedy actions under U.S. antidumping and anti-subsidy laws, a decline in operating capacity that squeezed supply, and an initial domestic economic recovery may have all contributed to a rapid price recovery in the American steel market in the first half of 2002. Steel consuming industries, some of which had protested the Section 201 remedy actions, now claim, by contrast, that higher steel prices have endangered their businesses and are driving their customers to seek foreign production sources. Subsequently, the price of steel has generally fallen again. Meanwhile, the American steel industry itself has accelerated a process of restructuring and consolidation begun even before the Bush safeguard tariffs were in place.

The balance of this report examines the current situation of the American steel industry. It looks at both the domestic structure of the U.S. industry and the international competition, including the changes brought to the import market by the safeguard tariffs and the impact of the legacy cost issue on industry restructuring.

Overall Performance of the U.S. Steel Industry

The Asian financial crisis began in Thailand in 1997 and quickly spread. It dampened demand for steel in that previously fast-growing region, and led Asian steelmakers to seek markets in the United States and Europe. By mid-1998, the financial crisis had spread to Russia and Brazil. These countries also sought to maintain steel production, in the face of domestic recessions and global oversupply of steel, by selling a larger share of their output to the United States. The result was a one-third increase in steel imports in 1998 over imports that were already near a record level in 1997. Exacerbating the surge was a rise in the U.S. dollar exchange rate during that period that made low-priced foreign-produced steel even more competitive against U.S. products.¹ According to the Department of Commerce study, *Global Steel Trade: Structural Problems and Future Solutions*, the heavy volume of low-cost steel entering the U.S. market drove prices below levels at which U.S. producers could continue to make steel at a profit.²

Figure 1 shows the evolution of market supply in the 1990s. It indicates the total apparent U.S. consumption of steel (finished and semi-finished) for each year, and the share that was provided by imports. “Apparent domestic consumption” equals total domestic product shipments plus imports, minus exports. In 2002 total domestic shipments of steel were 100 million tons,³ with 6 million tons exported.

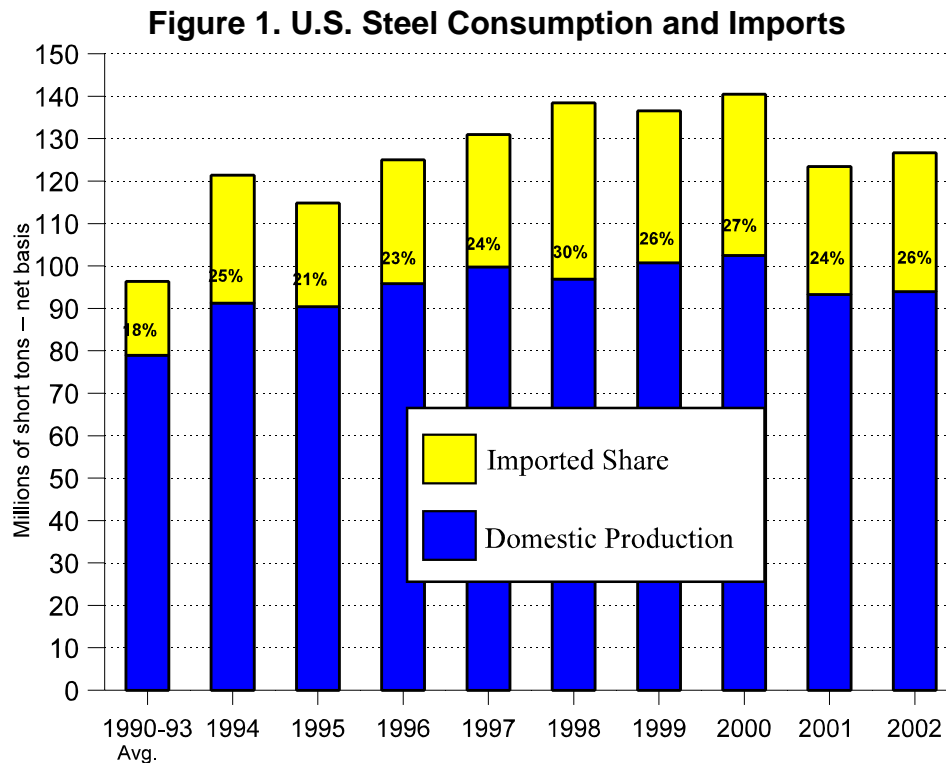
¹ It has been estimated that exchange rate changes affected the price competitiveness of both integrated U.S. steel mills and minimills by between \$66 and \$164 per metric ton of output. Richard McLaughlin, “Exchange Rates Seen at the Heart of Steel’s Woes,” special report in *American Metal Market* (AMM), September 3, 2001.

² Department of Commerce. *Global Steel Trade: Structural Problems and Future Solutions* (July 26, 2000), [<http://www.ita.doc.gov/media/steelreport726.html>]. A more recent detailed analysis of the industry’s economic condition and the developments that led to the present situation is the ITC report, *Steel: Investigation No. TA-201-73*, Vols. II-III, *Information Obtained in the Investigation* (Publication 3479, December 2001).

³ The American steel industry reports data in “short” tons, equal to 2,000 pounds. Most
(continued...)

Exports annually have been about 5-6 million tons for the past decade, so that the net domestic steel production consumed in the United States in 2001-2, as shown in Figure 1, has been about 94 million tons in each year.

Through 1992, the U.S. steel industry was still protected by voluntary trade restraint agreements negotiated in the 1980s. These were allowed to lapse after failure to negotiate a multilateral steel trade agreement.⁴ Apparent consumption grew strongly in the mid-1990s. But imports accounted for more than half of the increase between 1990-93 average levels and the 1998 peak. Surging imports accounted for all of the net one-year growth in annual consumption in 1998, as they reached 30% of U.S. apparent domestic steel consumption. On a U.S.-reported volume basis, imports in that year totaled 41.5 million tons, an all-time record. Since then, imports have fallen closer to the 30-million ton level, because of both U.S. market conditions and trade restraints. But with roughly a quarter of market share through 2002, they have remained historically high.



Source: American Iron & Steel Institute. *Annual Statistical Report*, 1999-2002.

Note: *John Williamson, Technical Information Specialist in the CRS Resources, Science and Industry Division, assisted in producing Tables 1A-B and Figures 1, 2, and 4 in this report. Gary Fitzpatrick of the Library of Congress Geography and Map Division produced the map in Figure 3.

³ (...continued)

international data is given in metric tons (MT, approximately 2,200 pounds), also frequently labeled “tonnes.” This report adopts the conventional U.S. usage, except, as noted, where the MT abbreviation is employed.

⁴ Gary Clyde Hufbauer and Ben Goodrich, *Steel: Big Problems, Better Solutions* (Institute for International Economics Policy Brief no. PB01-9), July 2001, p. 1.

Some authors have suggested that steel's problems in part are attributable to older, inefficient integrated steel mills ("unproductive domestic capacity"⁵). But a 1999 report by the ITC suggested then that problems of integrated mills provided only a partial explanation:

Indeed, the same trends for the industry as a whole are also apparent in the separate results of both integrated mills and minimills. ...In fact, minimills fared even worse than integrated mills from 1997 to 1998. ...The worse financial performance of [minimill] producers reflects in part their greater dependence on the merchant market, where imports are concentrated.⁶

In any case, by mid-1998 U.S. companies were losing substantial market share to imports of cheaper foreign steel. Many previously profitable domestic steelmakers experienced a decline in sales revenue, operating income, and profit in 1998 and 1999. Some small companies experienced a loss of access to capital and liquidity problems, which forced many companies into bankruptcy.⁷ Confronted with these problems, U.S. steel companies, steelworkers, and many Members of Congress argued that federal support for the steel industry and its workers was necessary.

In September 1998, the steel industry filed antidumping (AD) cases with the ITC against hot-rolled steel from Brazil, Japan, and Russia, and a countervailing duty (CVD) case against Brazil.⁸ As the situation worsened in other product areas, additional petitions were filed. In response to the import surge and growing congressional concern, the Clinton Administration conducted more than 100 AD/CVD investigations on steel products, a number of which were expedited to provide faster relief to industry. According to Robert LaRussa, then Under Secretary of Commerce for International Trade, "these helped turn back massive import surges seen during the 1998 crisis."⁹

The Clinton Administration announced a Steel Action Program on August 5, 1999, which had three main elements: (1) vigorous enforcement of U.S. trade laws, including expedited investigations; (2) bilateral efforts to address the underlying problems that led to the crisis, including consultations with Japan and Korea, and an agreement with Russia to limit steel imports; and (3) improved import monitoring mechanisms to detect potential import surges. Moreover, the Congress passed, and

⁵ Joseph B. Francois and Laura Baughman. *Costs to American Consuming Industries of Steel Quotas and Taxes* (Consuming Industries Trade Action Coalition, April 30, 2001), p. 1.

⁶ U.S. International Trade Commission. *Certain Hot-rolled Steel Products from Japan*, Publication no. 3202 (June 1999), p. 19. Cited in *Global Steel Trade*, p. 27.

⁷ *Global Steel Trade*. p. 34.

⁸ "Antidumping is relief to remedy the adverse price impact of imports sold on the U.S. market at 'less than fair value'...Countervailing duty is relief from the adverse price impact of imports that receive foreign government subsidies." In both cases, the form of relief is extra duties on imports. CRS Report RL30461, *Trade Remedy Law in the 108th Congress*, by William H. Cooper, p. 2 (as updated July 22, 2003).

⁹ U.S. Department of Commerce. International Trade Administration. *Testimony of Undersecretary Robert S. LaRussa before the Senate and House Steel Caucus*. December 12, 2000. [<http://www.ita.doc.gov/media/larussa121200.htm>].

the President signed, the Emergency Steel Loan Guarantee Act (P.L. 106-51, August 17, 1999), which was designed to assist financing of troubled steel companies unable to obtain commercial loans at reasonable rates.¹⁰

Despite these measures, large parts of the U.S. steel industry have never fully recovered from the 1997-98 import surge. Steel imports initially fell in 1999 as a share of U.S. consumption, as shown in Figure 1. However, imports rose again in 2000 to 27%, 50% higher than the average 18% market penetration of the early 1990s. With penetration levels at 25% or higher, imported steel captured much of the increase in demand for steel that accompanied the strong growth in the U.S. economy in the late 1990s. Many product areas experienced double-digit, or even triple-digit, one-year import percentage increases in 2000. Moreover, the increases were registered from a wide range of foreign sources.¹¹ But there was substantial disagreement between domestic producers and users over the causes and nature of the problems of the U.S. industry. “Almost universally, U.S. steel producers blame the second-highest import year on record for their late-2000 financial losses. Steel importers disagree, saying the problems can be traced to early-2000 domestic price increases that made cheaper foreign-made steel more attractive.”¹²

Domestic steel market growth ended abruptly in late 2000, as the manufacturing sector of the economy entered a recessionary period. Average steel industry capacity utilization through early August 2001 was 79%, down about 10 points from the same period in 2000, according to weekly American Iron & Steel Institute (AISI) figures. By late October, the capacity usage level fell to 65%.¹³ Capacity usage rates for November and December 2001 continued at similar levels.

Capacity utilization rates and steel prices rose dramatically in early 2002. Geneva Steel ceased operating in November 2001, then LTV, a major company with more than 8 million tons in capacity, shut down in December. Together, these developments closed 10 million tons in potential capacity, equal to about 10% of total U.S. domestic production. In early March 2002, President Bush announced his decision to establish safeguard duties of up to 30% on a wide range of products as the outcome to the Section 201 trade case. Prices generally rose following these developments. By the week ending March 23, 2002, the capacity utilization rate increased to 92.5%, the first time it had been above 90% since May 2000.¹⁴ AISI commented, “The figure is higher in part because there is less capacity overall in operation. Nevertheless, it does reflect some increase in optimism based on improved order books and expectations that the 201 remedy will benefit the health

¹⁰ In Section 101(b) of that Act, Congress explicitly linked the surge in imports, steel industry bankruptcies and the resultant loss of American steelworker jobs.

¹¹ “Steel Imports the Second-Highest Ever in 2000,” *Purchasing.com* (March 2001).

¹² *Ibid.*

¹³ *AMM*, August 8, 2001 and October 31, 2001.

¹⁴ *AMM*, January 7 and 10, 2002; *Wall St. Journal*, January 10, 2002.

of domestic steelmakers.”¹⁵ Through October 2002, weekly capacity utilization rates stayed near or above 90% and raw U.S. steel output rose to more than two million short tons per week, approximating the 100-million-ton annual level reached in the late 1990s and 2000. But as the year ended, both output and capacity utilization began to slip as percentage capacity usage in December 2002 was between 80-85%. Output was back below two million tons per week, even though LTV’s successor company, ISG, had restarted production.¹⁶

Import tonnage was actually higher in 2002 than in 2001, despite the Section 201 safeguard tariffs. The total for 2002 was 32.7 million tons, compared to just over 30 million in 2001. AISI president Andrew Sharkey commented that the numbers proved that, “Imports are flowing freely,” despite the tariffs, and that price and supply relationships were stabilizing. By contrast, David Phelps of the American Institute for International Steel, representing importers, said that the net increase was solely because of semi-finished imports brought in by domestic steel producers themselves. Otherwise, he noted, imports were actually down by 1.5%, despite higher domestic demand.¹⁷

In the first half of 2003, steel imports were clearly down in quantity – more than 20%, according to Commerce Department and AISI figures. Meanwhile, domestic production was slightly higher (by 4%, compared to the first half of 2002, due only to an increase in integrated mills’ production). Yet while imports substantially declined in quantity, the value of imports as reported by the Commerce Department was only 3% less than in the first half of 2002.¹⁸ In addition to the impact of Section 201 trade remedies, these developments can be explained by a number of factors. Semi-finished steel imports had surged in early 2002 to beat anticipated U.S. trade action. Once the safeguard was in place, such a surge did not recur in 2003, which impacted import volume more than value. In addition, there has been an unexpected prolongation of the period of slow U.S. economic growth and a fall in the U.S. dollar exchange rate, which made some imports more expensive. Reflecting this last development also is an increase in U.S. steel exports by nearly 60% in volume terms, to an annual rate of more than 9 million tons, in the first half of 2003, as they have become more competitive, and as demand in China particularly has boomed.

Supporters and opponents of the U.S. steel safeguard tariffs have produced conflicting reports on the impact of the tariff measures on domestic prices and the steel consuming industry. This subject was crucial in the ITC’s investigations

¹⁵ AISI. *Steelworks News Digest*, March 27 and April 11, 2002.

¹⁶ See AISI output figures in *AMM*, December 18, 2002. On pricing issues, see *AMM*, Nov. 21, 2002. Also, Nov. 13 and the “Destination Detroit” section in the Dec. 23, 2002 print ed., with reference to the impact of the average 10% increase in reported contract prices for some steel grades paid by auto producers on behalf of themselves and principal body part suppliers.

¹⁷ *Ibid.*, Dec. 30, 2002 print ed.

¹⁸ Trade and production data from AISI, “June 2003 Selected Steel Industry Data,” at [<http://www.steel.org>] (Viewed Sept. 5, 2003); and, U.S. Dept. of Commerce. Bureau of the Census, Foreign Trade Division. “Imports of Steel Products” (June 2003 Final), Exhibit 1.

monitoring developments in the domestic steel industry at the planned mid-point of the three-year safeguard measure, and regarding the impact on steel-consuming industries.¹⁹ The exhaustive three-volume report found somewhat mixed results with respect to price effects.

For the highest-volume categories, flat carbon and alloy steel products from both integrated producers and minimills, the ITC sampled quarterly pricing data for eight products. It found, in each case, that prices for domestically produced items were higher in the first quarter of 2003 than in the first quarter of 2002, the last quarter before the imposition of safeguard duties. The range was from 2.3% to almost 30%, although in most cases, the 2003-I price was actually lower than prices in late 2002. Moreover, in seven of the eight cases, the 2003-I price was lower than in the second quarter of 2000.²⁰ This lends credence to the argument of steel producers that even if though the safeguard had raised prices, they were not restored to earlier levels. By contrast, steel consumers have argued that domestic producers are trying to restore prices to an unusual “spike” in prices in early 2000.

Other carbon and alloy products tended to follow this pattern, but stainless steel did not. Tin plate prices were higher in 2003-I than in 2002-I, and lower than in late 2000, but the total variation was no greater than about \$10 on a base price around \$600/ton.²¹ Three long products, now produced almost exclusively at minimills, hot-rolled bar, cold-rolled bar and concrete reinforcing bar (rebar), all followed the pattern, but like tin, only to a limited degree. Rebar was higher in price in 2003-I against 2002-I, but only by 0.2%, for example.²² Stainless steel generally has displayed higher levels of import penetration, while receiving lower levels of safeguard protection. The price of stainless bar actually rose slightly between 2000 and early 2002, but fell 4.4% over the next year. Other stainless products studied, wire and wire rod, fell more than 20% in price between 2000 and early 2002, then continued to fall in price, despite the safeguards, by 2003.²³

With respect to the period after that covered in the ITC report, the Global Insight (formerly DRI-WEFA) analysis for the last half of 2002 and early 2003 correctly predicted that prices have peaked and would start to slide. It found the rise in prices to be driven by short-term supply shortages, not real demand, and believed higher

¹⁹ The two reports were released together as a single report, published in three volumes: USITC. *Steel: Monitoring Developments in the Domestic Industry* (Investigation no. TA-204-9) and *Steel-Consuming Industries: Competitive Conditions with Respect to Steel Safeguard Measures* (Inv. no. 332-452), issued as ITC Publication 3632 (September 2003). Hereafter, *Steel* (publ. 3632).

²⁰ *Ibid.*, Vol. 1, p. Flat II-35. See also Tables Flat II-25 through 29, 32.

²¹ *Ibid.*, Vol. 1, p. Flat III-19 and Table Flat III-14.

²² *Ibid.*, Vol. 1, p. Long II-21 and Table Long II-14 and 15; p. Long III-19 and Tables III-15 and 16; p. Long IV-19 and Table Long-15.

²³ *Ibid.*, Vol. 2, Stainless pp. II-21, III-16 and IV-19, and Tables Stainless II-16, III-15 and IV-15. Price movements from the consuming industry perspective, using the Bureau of Labor Standards Producer Price index and spot prices, are summarized in *ibid.*, Vol. 3, pp. 2-2 through 2-9.

prices to be eroded by the reorganization and reopening of some shuttered mills. More recently, as prices stabilized at lower levels in 2003, this industry review expressed some concern about the increased build-up of foreign capacity and the ultimate effects on U.S. price levels. On the other hand, most of the U.S. industry in midyear 2003 was trying to raise prices to counter higher costs, specifically because of rising natural gas and steel scrap prices.²⁴

Changing Structure of the Domestic Steel Industry

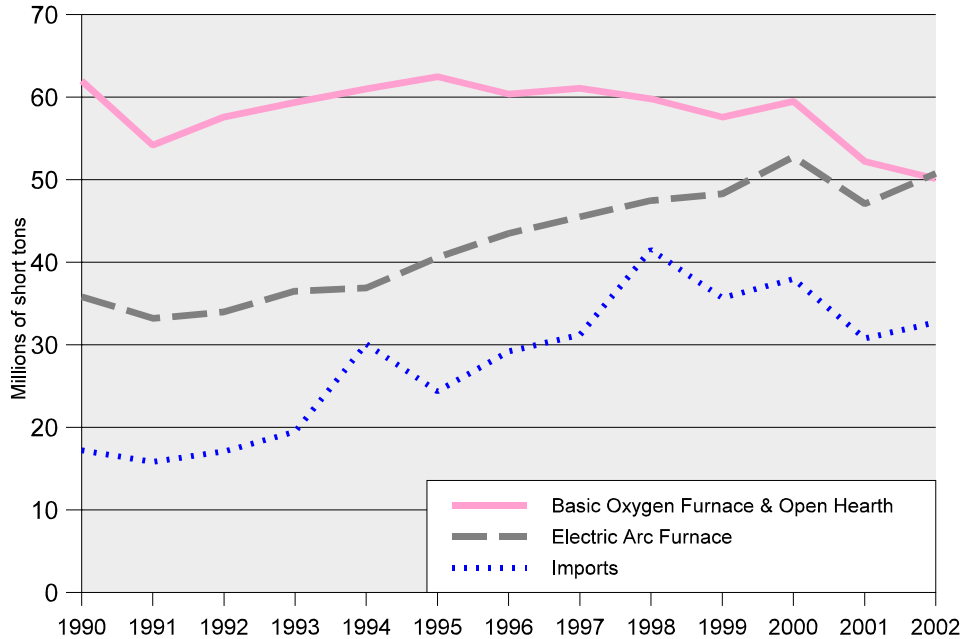
It seems unlikely that the American industry will disappear, even the long-beleaguered integrated steel mills. But the structure, the ownership and the labor organization patterns in the industry are all changing. For example, John Anton of Global Insight accurately predicted in 2002 during the Bethlehem and National Steel bankruptcies that if either company were driven into liquidation, “it is highly probable that each mill would quickly re-start under new ownership. There is not enough sheet capacity in the United States without them, and the facilities are attractive if the legacy cost burden is erased through liquidation.”²⁵ Unlike LTV, neither Bethlehem nor National went into Chapter 7, as their operating assets were acquired out of Chapter 11 bankruptcy by ISG and U.S. Steel, respectively. However, while the industry should survive, both changing technology and international competition have contributed to a tougher and more competitive environment for American steelmaking.

Figure 2 illustrates how the impact of trade and industry problems for steel has not been even across the sector. The production of the large integrated mills using mostly basic oxygen furnaces (the last U.S. open hearth plant closed in 1991) hovered around 60 million tons per year in the 1990s, then fell substantially below that figure. Minimills employing electric-arc furnaces (EAFs) steadily increased production after the recession of 1991. Their production topped 50 million tons for the first time in 2000, when it reached 47% of domestic raw steel production, up from 37% at the beginning of the 1990s. Output from both integrated steel works and minimills fell in 2001. In 2002, minimills overtook basic oxygen furnace (BOF) steel production for the first time, by 50.8 million tons to 50.1 million tons. But as ISG brought the former LTV assets back on line, BOF production regained the lead in the first half of 2003 by a small margin, as it increased by 10.5%, while EAF production declined by 2%.²⁶

²⁴ DRI-WEFA. *Monthly Steel Report* (Aug. 2002). Global Insight. *Monthly Steel Report* (Oct. and Nov., 2002, June and Sept. 2003). The cost squeeze on inputs is discussed at length in three articles in *AMM* of Sept. 15, 2003: “Critics Weigh WSD Steel Scrap Outlook,” p. 13; “For Oregon [Steel], the Timing Is Tough, But There’s No Turning Back;” and, “Come and Get It: Brazilian Pig Iron Producers Ride the Price Surge,” both on p. 17.

²⁵ Global Insight. *Monthly Steel Report* (December 2002), p. 1.

²⁶ AISI. “June 2003 Selected Steel Industry Data,” [<http://www.steel.org>], as viewed on Sept. 5, 2003. The electricity blackout of August 2003 disrupted production at integrated mills in the U.S. and Canada, but may have little impact on overall production results; Global Insight, *Monthly Steel Report* (August 2003), p. 1. However, the blackout was the
(continued...)

Figure 2. Sources of U.S. Steel

Source: DRI/WEFA. *Steel Industry Review*; and, American Iron & Steel Institute. *Annual Report*. 2002.

Figure 2 also shows the import trend generally increasing since the early and mid-1990s, even if we discount the 1998 import surge. Thus, the integrated mills are under competitive pressure for many products from two different sources.²⁷ But the problems of the industry are not confined to integrated mills. Many minimill operators have gone into bankruptcy, ceased operating or been acquired out of financial difficulties. The latest is Georgetown Steel of South Carolina, a wire rod producer, which reopened in 2002, only to go bankrupt and close again in October 2003.²⁸ One recent report questions whether there is now overcapacity in some

²⁶ (...continued)

last in a chain of events leading Republic Engineering to file again for bankruptcy; see the summary in *AMM* (print ed.), Oct. 13, 2003, p. 16.

²⁷ Gary Hufbauer and Ben Goodrich argue that “although integrated steel producers and the USWA concentrate their blame on imports, over half the decline in traditional integrated steel production is attributable to the rise of domestic minimills...” but their data also show that the rise of imports increased at a faster overall rate than minimill production, *Steel Policy: The Good, the Bad and the Ugly* (Institute of International Economics Policy Brief PB03-1), Jan. 2003, p. 5 and table 1.

²⁸ “Georgetown, SC, Steel Mill Pins Hopes on Bankruptcy,” *Sun News* (Myrtle Beach, SC), Oct. 22, 2003; “Owner’s Dream Sours for Georgetown, SC, Steel Plant with Closure,” *Post and Courier* (Charleston, SC), Oct. 22, 2003; “Gone with the Wind,” *AMM*, Oct. 27, 2003 (print ed.), p. 6.

product sectors where minimills have become the exclusive domestic production source.²⁹

The impact of these market developments have had the most impact on states with steel industries. **Figure 3** shows the major steelmaking states as of 2000, which is the U.S. industry's most recent year of solid financial results and high output. It indicates the 14 states that each shipped more than \$1.0 billion of steel and related ferroalloy products, according to the Census Bureau's *Annual Survey of Manufactures (ASM)* for that year. Data for 2001 and 2002 (the latter year not yet published) will be occluded by the industry downturn, bankruptcies and consolidation developments. The 2000 data still gives the clearest picture of where established capacity is most affected by the outcome of U.S. policies affecting steel.

Three states – Indiana, Ohio and Pennsylvania – shipped the majority of U.S.-produced steel, measured by value, in 2000. They also accounted for 76,000 of 144,000 total employees then working in the steel industry, according to the *ASM*. These states, plus, to a lesser extent, Maryland, Illinois and West Virginia, are home to most of the U.S. integrated steel mills, while Michigan has integrated mills near Detroit, which specialize in supplying the automotive industry. Arkansas, South Carolina and Kentucky, along with Indiana, are particularly the location of many of the steel minimills. Alabama's production is divided between a number of minimills and a large integrated steel mill complex near Birmingham.

²⁹ *AMM*, "Balancing Act: Battling Bloat in the Wide-Flange Beam Market," January 27, 2003 print ed., pp. 3-5.

Figure 3. Top Steelmaking States

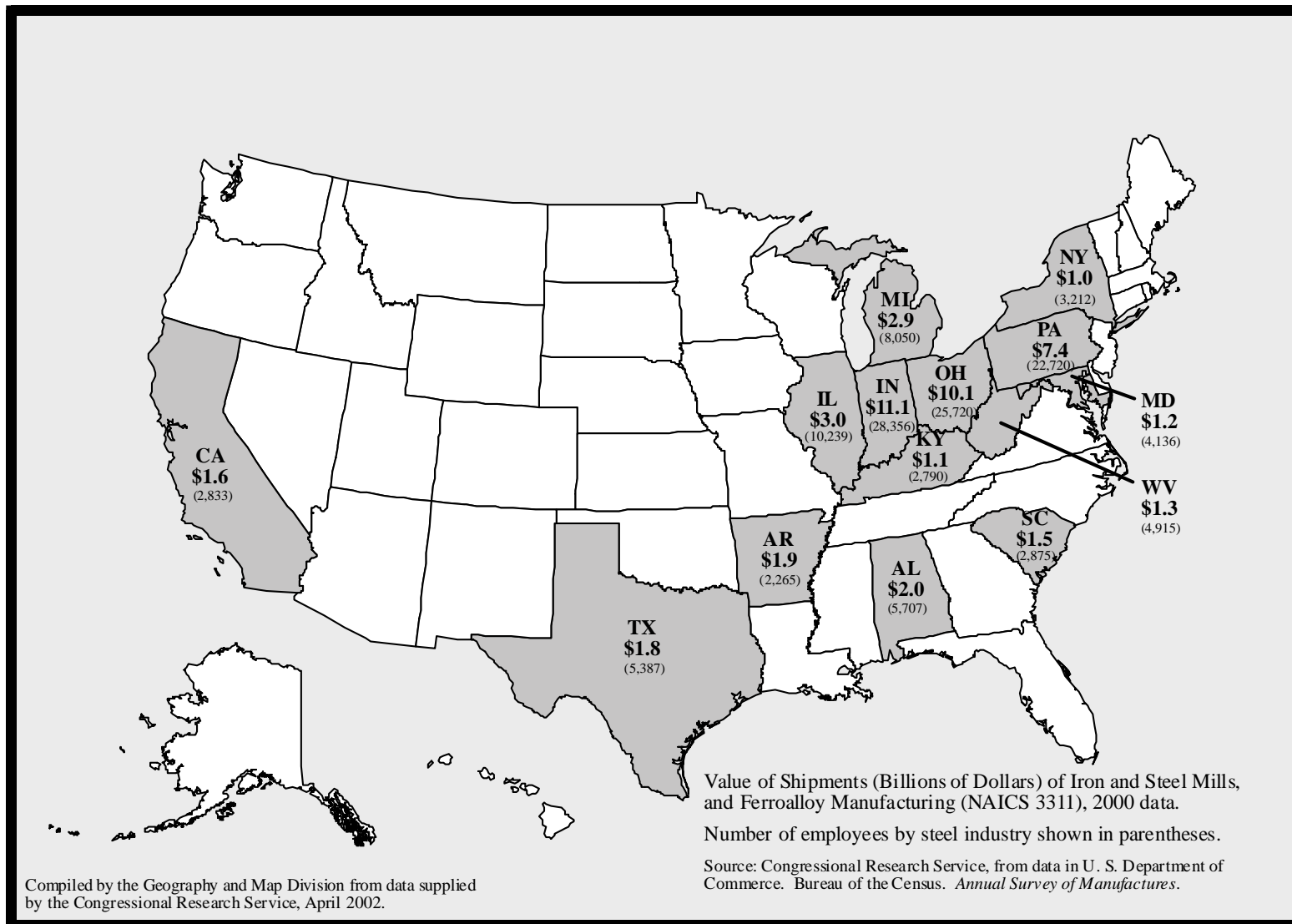


Table 1A. Major North American Steel Companies in 2002
(Companies producing at least 2.2 million net tons of raw steel in 2002)

	2000	2001	2002
Nucor ^m	11.3	12.3	13.6
U.S. Steel	11.4	10.1	11.5
Bethlehem	10.0	8.8	9.0
AK*	6.5	6.1	6.0
National	6.1	6.0	5.8
Ispat Inland	–	5.4	5.7
Stelco	5.6	5.0	5.1
Dofasco	4.5	4.5	4.8
Gerdau AmeriSteel ^m	2.9	2.5	3.4
Ahmsa	3.7	3.3	3.2
North Star ^m	2.9	3.2	3.1
Rouge	2.9	2.8	3.1
Hylsamex	3.1	2.5	3.1
Ipsco ^m	2.0	2.4	3.0
Weirton	2.5	2.4	2.8
Wheeling-Pittsburgh	2.4	2.3	2.5
Algoma	2.4	2.2	2.4
ISG***	8.2	6.5	2.4*
Steel Dynamics ^m	2.0	2.0	2.4

* *American Metal Market* estimate. ** 2000 total Co-Steel only. *** 2001-02 LTV totals.

^m Minimill operator

Source: *American Metal Market*, March 11, 2002, and April 14, 2003 print ed.

Table 1A shows how individual company production, and the industry as a whole, has evolved since 2000, based on data published by *American Metal Market*. In 2001, for the first time, the leading North American steel producer was a minimill operator, Nucor. The Charlotte-based company, with operations in eight states, ended a century of leadership in production by the largest integrated steel producer, United States Steel Corporation. Nucor, which has been acquiring minimills as well as building new plants of its own, gained the leadership by a wide margin,

outproducing U.S. Steel by about 20% in tonnage in 2001-2. But strong moves toward consolidation have already been undertaken in both the integrated and minimill halves of the domestic steel industry, so that the listing of names on future tables may look very different.

ISG, as shown below, has put together enough capacity from the LTV and Bethlehem assets to rival the total amounts controlled by Nucor and U.S. Steel. Its 2002 total production in Table 1A reflects only an estimate of its partial-year 2002 output, after it acquired and re-started the LTV assets in the first half of 2002, and before it made the Bethlehem acquisition in 2003. It completed that deal for \$1.6 billion in April, 2003.³⁰ ISG, privately held by an investment group led by Wilbur Ross, now reportedly has informed the Securities Exchange Commission that it will make an initial public offering (IPO) of \$250 million.³¹ It remains active in the consolidation business, having swapped one of its old LTV Indiana operations (a “pickling mill”) for the U.S. Steel plate mill in Gary, while also indicating some interest in acquiring Weirton Steel.³² The latter, an employee-owned, West Virginia-based integrated mill, though relatively small, is the number two U.S. supplier of tin plate. It declared bankruptcy on May 19, 2003.³³

Meanwhile, the other two largest integrated steelmakers, U.S. Steel and AK Steel, competed for ownership of bankrupt National Steel Corporation. In December 2002, the Pension Benefit Guaranty Corporation (PBGC) declared insolvent the pension funds operated by National Steel. The PBGC’s action in this case and the similar case at Bethlehem was criticized by the companies and the United Steelworkers union (USWA); its role will be discussed further in the section on legacy costs below.³⁴ The PBGC move, though controversial, cleared the way for U.S. Steel to make a total bid of \$950 million for National’s operating assets on January 9, 2003.³⁵ On January 23, 2003, AK Steel made a competing offer for National to the bankruptcy court worth \$1.2 billion. The USWA, which had to

³⁰ *AMM*, April 24, 2003; *Washington Post*, May 1, 2003.

³¹ *Cleveland Plain Dealer*, August 1, 2003; *Baltimore Sun*, August 2 and 6, 2003.

³² *AMM*, August 14 and 28, 2003. Ross also acquired bankrupt textile producer Burlington Industries on North Carolina in August 2003. He is quoted as saying “There’s a common enemy, and the common enemy is illegal, inappropriate and subsidized foreign goods. That should be the common pursuit of the steel people, the textile people, the farm people, everybody.” Quoted in *Financial Times*, Aug. 22, 2003; see also esp. Michele Abbott, “Billionaire Aims for Collective Pressure on Washington Trade Policies,” *High Point Enterprise*, Aug. 25, 2003; and, *USA Today*, July 15, 2003; *Greensboro News & Record*, July 30, 2003; *AMM*, June 19, 2003. He has subsequently played a leading role in founding the “Free Trade for America Coalition,” representing a cross-section of business and labor organizations, who say they have been hurt by U.S. trade policy (*AMM*, Sept. 26, 2003).

³³ Weirton Steel. “Weirton Steel Files Voluntary Petition to Reorganize, Become More Competitive,” press release, May 19, 2003; *New York Times*, May 19, 2003; *Charleston Daily Mail*, May 19, 2003; *AMM*, May 20, 2003.

³⁴ *South Bend Tribune*, Dec. 6, 2002; *Wall Street Journal*, Dec. 6, 2002.

³⁵ *AMM*, Jan. 10, 2003; Bloomberg.com, “U.S. Steel to Buy National Steel Assets for \$950 Million” (Jan. 9, 2003).

renegotiate labor contracts with any party that bought out Bethlehem and National, indicated that it viewed its relations with AK Steel unfavorably after a three-year lockout at an AK plant that had only recently ended; also, AK had brought its new Rockport, Indiana, plant on line as a non-union operation. Ultimately, the union and AK could not reach agreement, U.S. Steel increased its offer, and won the bidding war for National Steel's assets.³⁶ Bethlehem, LTV and National, at one time the number-two, -three and -five names ranked by size among integrated steel producers, will be gone from future lists.

Similar consolidations have occurred and are continuing among minimills as some minimill operators moved rapidly in 2002 to restructure their side of the steel business. Nucor, already by far the largest U.S. minimill operator, acquired Trico, an Alabama minimill rated at more than 1 million tons, out of the LTV bankruptcy proceedings. In May 2002 it acquired Birmingham Steel, the financially troubled second-leading U.S. steel minimill operator.³⁷ Then, in 2003 Nucor bought the Kingman, Arizona plant of North Star, the steelmaking affiliate of Cargill, Inc. According to *American Metal Market*, in combination with the Birmingham steel deal, this gives Nucor "control of three of the five minimills west of the Rockies."³⁸

Other minimill operators have undertaken similar moves. Gerdau, a Brazilian-based company, operated a total of seven U.S. and Canadian minimills, as well as being the pioneer minimill operator in South America. In 2002 it merged its North American-based operations with Co-Steel, a Canadian-based company that also operated minimills in the United States. As Gerdau AmeriSteel, this is now the second largest operator of minimills in North America, with strength especially in long products, such as concrete reinforcement bars, structural steels and wire products.³⁹ Steel Dynamics (SDI), a minimill operator based in Fort Wayne, Indiana, which also specializes in long products, bought Qualitech, a closed Indiana minimill producer of special bar quality steel, after a legal contest with Nucor. Later, SDI bought GalvPro, an Indiana finishing mill formerly owned jointly by two integrated companies.⁴⁰

A stated goal of the Bush Administration in applying the Section 201 tariffs is to provide a period of respite from import competition, so the industry can restructure through consolidation and other measures, and better meet international

³⁶ *AMM*, Jan. 13, 24 and 27; Feb. 3 and 10; April 21 and May 21, 2003; Bloomberg.com, "AK Steel Makes Rival \$1.02 Billion Bid for National Steel" (Jan. 23, 2003). On the USWA role in reorganizing the industry and renegotiating labor contracts more generally, see *AMM*, Dec. 24, 2002, Jan. 8, 2003 and "A Template for Change" in Jan. 20, 2003 print ed., pp. 2-4; *Business Week*, "Salvation from the Shop Floor" (Feb. 3, 2003), pp. 100-01.

³⁷ *AMM*, June 3, 2002.

³⁸ Cargill, Inc. "North Star Steel Sells Its Kingman, Arizona Plant to Nucor Corporation," (press release), March 24, 2003; *AMM*, March 26, 2003.

³⁹ *Ibid.*, August 14 and 29, 2002.

⁴⁰ The recent flurry of minimill consolidations is summarized in the *AMM*, "Supersizing the American Mini-mill," special section in Dec. 9, 2002 print ed. On the SDI deal for Qualitech, see also *ibid.*, Jan. 3, 2003; on GalvPro, *ibid.*, Feb. 6, 2003.

competition.⁴¹ During the period that the safeguard has been in effect, consolidation efforts have accelerated, encouraged also by the abrupt resolution of some of the larger bankrupt integrated mills' legacy cost problems through the actions of the PBGC. *American Metal Market* has sketched out what it sees as a prospective "two-tier" structure of the North American-based steel economy, as shown in **Table 1B**.

Table 1B. The "New Big Seven" in North American Steel
(possible annual output rounded to the nearest million tons)

TIER ONE		
		Possible Output
Nucor (following Birmingham, Trico, and North Star Kingman acquisitions)		18
U.S. Steel (following National Steel acquisition)		17
ISG (following Bethlehem Steel acquisition)		16
TIER TWO		
AK Steel		6
Ispat Inland		6
Stelco		5
Dofasco		5

Source: *American Metal Market*, April 14, 2003 print ed.

Overall, the consolidation of the U.S. domestic steel industry on the U.S. side of the border, including some steps toward establishing overseas operations, have, as will be shown in the next section, created companies that are more on the same scale as the major foreign steelmakers.⁴² But to describe the North American structure as "two-tier" is somewhat misleading; the second tier is dominated by foreign-owned companies, or North American companies whose prospects are uncertain. Ispat Inland is part of the LNM global steel group controlled by Lakshmi N. Mittal, which is currently the world's second-largest steelmaking group (see below). One other healthy company that could be included in the second tier, Gerdau AmeriSteel, has Brazilian and other South American interests that give it total steelmaking capacity of about 10 million tons.

⁴¹ "I have determined that the safeguard measures will facilitate efforts by the domestic industries to make a positive adjustment to import competition...[including] consolidation of United States steel producers..." President George W. Bush. Memorandum on "Action under Section 203 of the Trade Act of 1974 Concerning Certain Steel Products" (Mar. 5, 2002) in *Message to Congress* (House Doc. 107-185), March 6, 2002, p.56.

⁴² On this point, see the survey in *Business Week*, "Up from the Scrap Heap," (July 21, 2003), pp. 42-47.

Among the North American-based “second-tier” companies, AK Steel has recently been losing money, and its CEO, Richard Wardrop, had major disagreements with the Ohio state government. Following the failure to acquire National Steel, he was reportedly forced to resign by his board, and there have also been press reports that AK may be seeking an acquiring party.⁴³ The two integrated Canadian companies on the “second tier” list, Dofasco and Stelco, have gone in opposite directions, though both have been affected by the recent rise of the Canadian dollar exchange rate. Dofasco has seen earnings decline, but has stayed in the black. Stelco has had consecutive money-losing quarters, has closed some major operations and seen its CEO resign. One issue has been pension givebacks, as the company’s management states that it cannot compete with U.S. integrated mills that have shed their pension costs through the bankruptcy process. One source has suggested an all-Canadian merger between Stelco and Dofasco, but also conceded that their business strategies and corporate cultures are radically different.⁴⁴

The International Competition

The steel industry’s demand for Section 201 protection conflicted with the interests of a wide range of U.S. trading partners. **Figure 4** shows trading partners that exported at least 500,000 tons of steel per year to the United States in 2000-1 and their final 2002 import totals (note that international data, as used in this figure, are in metric tons, MT, not short tons). The overall volume of steel imports declined by more than 20%, from 34.4 million MT in 2000, the second-highest year ever, to 27.4 million MT in 2001, then rose to 29.7 million MT in 2002. Import numbers were volatile in 2002, owing to both the uncertain recovery of the U.S. economy and the impact of the U.S. safeguard tariff and, as noted earlier, have fallen in the first half of 2003.⁴⁵ But the U.S. market remains significant for a large and diverse group of countries, representing a wide range of geography, development levels and U.S. policy interests.

⁴³ *AMM*, Sept. 19, 2003 and “Praise and Parting Shots: The Mixed Legacy of Dick Wardrop,” Sept. 22, 2003(print ed.), p. 11; *Akron Beacon-Journal*, Sept. 20, 2003. As a result of further reported quarterly losses, the company has announced job cuts equal to a quarter of total employment; *Dayton Daily News*, Oct. 25, 2003, p. D1; *AMM*, Oct. 27, 2003.

⁴⁴ The idea was proposed by David Olive, “Time for Dofasco to Pop the Question,” *Toronto Star*, Aug. 1, 2003; see also *Hamilton Spectator*, July 29, 2003; *Vancouver Sun*, July 29, 2003; *Financial Post*, Aug. 5, 2003; *AMM*, July 30, 2003, and especially, the special section comparing the two Canadian companies in the Sept. 1, 2003 print ed., pp. 3-5. On more recent results, see: Steve Arnold, “Dofasco Weathering Profit Slide,” *Hamilton Spectator* (Oct. 24, 2003), p. A20; “Stelco Warns of Cuts after \$42m. Loss,” *Calgary Herald* (Oct. 22, 2003), p. D4; Greg Kennan, “Stelco Slashing Work Force, Units Pensions, Other Costs,” *Toronto Globe and Mail* (Oct. 23, 2003), p. B1, and on a demonstration against pension cuts at Stelco headquarters, *Hamilton Spectator*, Oct. 31, 2003.

⁴⁵ This point was widely discussed at both the Section 201 “mid-point” hearings conducted by the U.S. International Trade Commission in July 2003, and in the hearings that it held on the impact of Section 201 on other industries in June 2003.

One reason for such diversity is that a general rise in the U.S. dollar exchange rate in the late 1990s made imported steel from all sources much cheaper in the U.S. market. The exchange rate of the U.S. dollar increased nearly 30% in value against a range of other currencies after early 1997, making U.S.-produced steel less price-competitive against all foreign competitors. In a study co-sponsored by steel companies and industry organizations, Robert Blecker estimated that the dollar's rise between 1995 and 2000 implied a 24.4% increase in steel imports, based on observed elasticities, or "about 44% of the actual increase" in volume.⁴⁶ The dollar declined 9% against other industrial country currencies between January and December 2002, and has since weakened still further against the euro. But it rose 6% against the Federal Reserve index of other important trading partner currencies in 2002, and by the end of October 2003 remained slightly higher than the pre-1997 level against major industrial country currencies, and almost 50% higher against those of other important trading partners.⁴⁷

The 15 nations of the **European Union** (EU) form a high-wage trading area with a mature steel industry facing some of the same problems as parts of the U.S. industry. Yet, the EU was actually the largest source of U.S. imported steel in both 2000 and 2001, supplying 5.5 million MT in 2001, compared to 6.4 million MT in 2000. But as the U.S. safeguards took hold and the euro strengthened, the EU's exports fell further to 4.8 million MT in 2002, 16% of total imports by volume. And while EU exporters tend to specialize more in higher value products and received many specific product exclusions under the Section 201 safeguard program, their share of imports by value also fell sharply, from 29% in 2001 to 22.5% in 2002. The leading European national exporter to the United States is **Germany** with 1.3 million MT, more than twice the total of any other EU member in 2002. **France**, was second at 635,000 MT, while the **Netherlands** and the **United Kingdom** were the only other EU producers who exported more than a half-million MT to the United States in 2002. **Italy**, **Spain** and **Belgium** all exported more than 300,000 MT, while **Sweden**, **Austria** and **Luxembourg** were also important suppliers especially of lower-tonnage but higher-value specialty products.

The European Commission has claimed that the structure of the Section 201 tariff remedies and exclusion of EU members from any national exemptions would unfairly target more than \$2 billion of EU products.⁴⁸ Actual U.S. import figures seem to confirm the EU's estimate to some degree, as **Canada**, exempted from the Section 201 safeguard action, in 2002 surpassed the EU in volume of imports supplied to the U.S. market and moved up to a virtual tie for first with the EU in value: \$2.7 billion for Canada, versus \$2.8 billion for the combined EU total. As a result of these developments, it is no surprise that the EU has taken the lead among

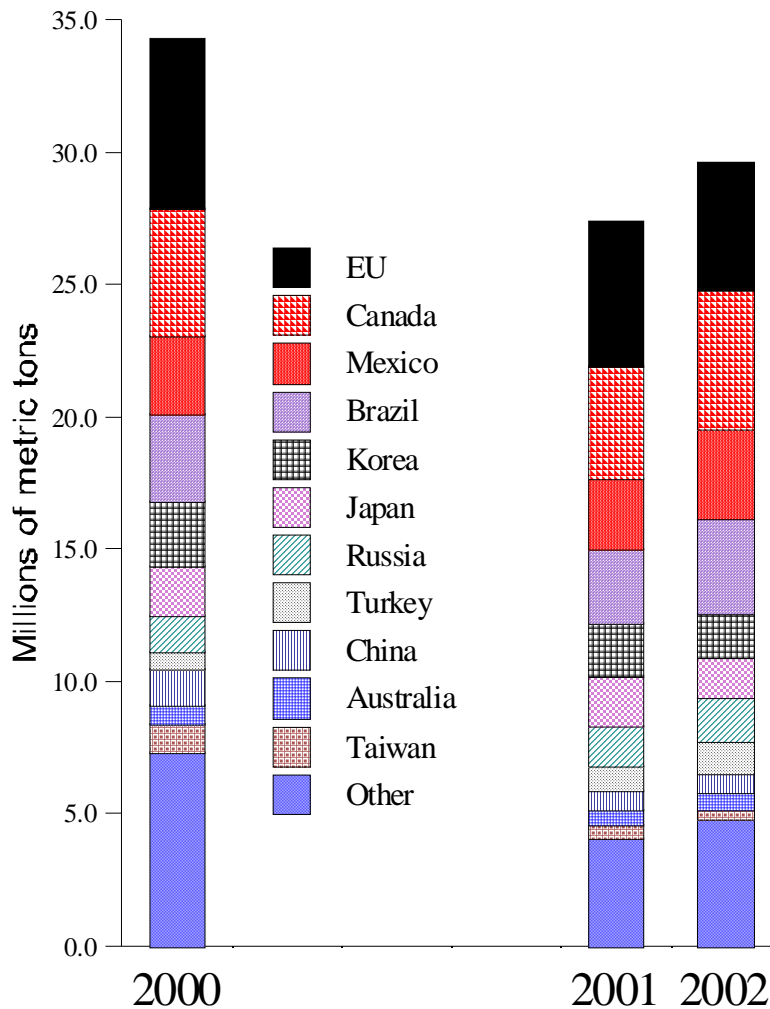
⁴⁶ Robert A. Blecker, *Let It Fall: The Effects of the Overvalued Dollar on U.S. Manufacturing and the Steel Industry* (October 2002), pp. 27-28.

⁴⁷ Board of Governors. Federal Reserve System. "Foreign Exchange Rates (Daily)" (Series H.10), October 31, 2003.

⁴⁸ This was the level of retaliatory sanctions that the European Commission proposed in connection with its complaints against the U.S. Section 201 trade action. BNA. *Daily Report for Executives (DER)*, "EU Plans to Aim \$2.5 Billion in Sanctions at U.S. Areas in Favor of Steel Safeguards," March 25, 2002.

U.S. trading partners in filing a successful case against Section 201 safeguards at the World Trade Organization (WTO) and threatening immediate retaliation later in 2003, if their position is upheld after the U.S. appeal is heard. One of the key EU complaints is lack of “parallelism” in the U.S. policy, meaning a claim that the U.S. policy has been discriminatory.

Figure 4. Sources of U.S. Steel Imports



Source: U.S. Dept. of Commerce, Bureau of the Census., Foreign Trade Division. *Imports of Steel Products*. (Dec.2001 and Dec. 2002 Final) Exhibit 2.

The North American Free Trade Agreement (NAFTA) partners, **Canada** (5.2 million MT) and **Mexico** (3.4 million MT), ranked first and fourth among steel exporters to the United States in 2002. President Bush exempted all Canadian and Mexican products from the Section 201 remedy measures. Canadian and Mexican steel industries are closely integrated with the U.S. market, and Table 1A showed that many of the largest North American steel producers are Canadian and Mexican companies (Stelco, Dofasco, Ahmsa, Hylsamex, and Algoma). Canada and Mexico

have therefore been two of the chief foreign beneficiaries of the U.S. safeguard tariffs. But the overall downturn in manufacturing in North America, plus the higher exchange value of the Canadian dollar, has meant that Canada's steel industry has been hit with hard times.⁴⁹ The Canadian government considered its own safeguard actions, but in the end decided to refrain from such measures, in part because of the large role played in the Canadian market by imports from the United States.⁵⁰

Mexico's industry has also been struggling, in part because of U.S. trade enforcement actions, but mainly because of the recent U.S. economic slowdown. With 18 million MT of annual production capacity, the Mexican industry is only a fraction of the size of that in Canada and the United States, but it is second only to Brazil in Latin America.⁵¹ Mexico has recently filed cases at the WTO against U.S. trade orders on steel plate and oil country tubular goods imported from Mexico.⁵²

Brazil ranked third among steel importers to the U.S. market in 2002 with 3.6 million MT. Brazil has been especially important as a supplier of slabs, the most widely shipped shape of semi-finished steel, to the U.S. market; two-thirds of Brazil's steel exports are semi-finished products.⁵³ These exports were included in the Bush safeguard tariffs, but Brazil also received large quotas and exclusions for its semi-finished exports. Boosted by a pre-safeguard surge in early 2002, total U.S. tonnage imports from Brazil increased 26% for the year. But the annual rate of Brazil's exports to the United States fell by two million MT in the first half of 2003.

Brazil's industry, formerly dominated by government-owned or -controlled parastatal companies, has been privatized. It went through a period of substantial modernization and consolidation since 1990. Thirty-four companies were reduced to a total of 12, controlled by seven groups, with new direct foreign investment, especially from Europe, playing a big role. Employment was reduced by more than 60%, with more than 110,000 jobs eliminated. With slow growth in its domestic market, Brazil will export about 50% of its 33 million MT of forecast out in 2003,

⁴⁹ In addition to the problems of Dofasco and Stelco, mentioned above, Algoma, an integrated company that only recently emerged from bankruptcy, has announced new losses and layoffs; *AMM*, May 16, 2003; *Toronto Star*, July 31, 2003. Slater Steel, a large Canadian-based stainless steel manufacturer, has placed both its U.S. and Canadian operations in bankruptcy reorganization; *AMM*, June 3 and Aug. 29, 2003; *Hamilton Spectator*, August 12, 2003.

⁵⁰ Peter Brieger and Ian Jack, "Steel Groups Slam No-Tariff Decision," *Financial Post*, Oct. 7, 2003; Mike Pettapiece, "Steel Industry Scorns Ottawa; Angry Steel Producers Want Protective Measures Against Offshore Imports," *Hamilton Spectator*, Oct. 7, 2003, p. A18.

⁵¹ According to figures of the Latin American Iron and Steel Institute (ILFA); it directly employs 50,000 workers. "Mexico Steel Production capacity at 18 Million MT Annually, Second in Latin America," *Spanish News Digest* (Oct. 31, 2003).

⁵² *AMM*, Aug. 29, 2003; Mexico requested a WTO dispute settlement panel in the two cases on Aug. 8, 2003 WTO documents 03-4171 and 03-4175. According to a statement released by *Inside US Trade* dated Aug. 18, 2003, the U.S. representative rejected the initial request.

⁵³ Brazil data from Instituto Brasileiro de Siderurgia (IBS). *The Brazilian Steel Industry: Competitive in an Open Global Market* (Dec. 2001); *Pocket Yearbook 2002*, and other information supplied by IBS.

with international demand especially strong in China.⁵⁴ Brazilian companies also made substantial direct investments in the U.S. market, including half-ownership of California Steel Industries (CSI), a major West Coast rolling mill. Gerdau, as mentioned earlier, is now the second-largest operator of minimills in North America, with strength especially in long products.⁵⁵ CSN of Brazil acquired Heartland Steel of Indiana, and was also reportedly involved in discussions to acquire a joint venture position at the Baltimore facilities of Bethlehem Steel, although this deal was never completed.⁵⁶

Brazil's government and private sector appear to continue to view the reorganized Brazilian steel sector as a growth industry. The Brazilian development bank, known by its initials BNDES, has indicated that it will allocate up to \$2.3 billion in loans, to encourage a planned total of \$8 billion in projects to expand capacity from 33 million MT to 40 million MT by 2009. CST, the major Brazilian slab producer, CSN and Gerdau, among other companies, all plan capacity expansions. With ties to foreign steelmakers interested in Brazil, the steel industry increasingly looks to its domestic market to sell finished products, but such a shift is hampered by the slow domestic growth rate. Therefore, the Brazilian industry will continue to rely heavily on its role especially as a supplier of iron ore, semi-finished steel and, perhaps increasingly, finished steel products to the world market. For example, Companhia Vale do Rio Doce (CVRD), a major iron ore and steel company, which owns the Brazilian interest in CSI, has signed a deal with Nucor to develop a major new project in northern Brazil to export pig iron.⁵⁷

In 2000, the three leading Asian suppliers were **Korea**, with 2.4 million MT, **Japan**, 1.9 million MT, and **Taiwan**, at 1.1 million MT. All have declined substantially since then. Korea's exports to the U.S. market declined in 2001 to 2.0 million MT, in 2002 to 1.7 million MT, and to an annual rate of just 1.2 million MT in the first half of 2003. Imports from Japan declined only marginally in 2001, but then fell to 1.5 million MT in 2002, and to an annual rate of less than 1.0 million MT in the first half of 2003. Imports fell even more substantially from Taiwan – by more than half to 518,000 MT in 2001, just 345,000 MT in 2002, and at an annual rate of less than 200,000 MT in early 2003. Korea's Pohang Iron & Steel Company (POSCO) began 2002 as the world's second-largest steel company, though it was overtaken by the LNM group (see Table 2). Japan's five big steelmakers, also among the world's biggest, are actively consolidating. NKK and Kawasaki merged to form

⁵⁴ Estimates from Gerdau CEO Jorge Gerdau Johannpeter reported in *Jornal de Commercio* (Oct. 22, 2003).

⁵⁵ *AMM*, August 14 and 29, 2002.

⁵⁶ *Ibid.*, March 27, 2002.

⁵⁷ *Valor Economico* (Sao Paulo), "BNDES Predicts US\$8 Bil. Investments in Steel Sector Until 2009," (translated by South American Business Information) Aug. 21, 2003; *Portuguese News Digest*, "Brazil Steel Sector to Invest \$8.0 Billion in Capacity Expansion by 2009," Aug. 21, 2003. Another source states that BNDES is being asked to assist consolidation within the Brazilian industry in order to prevent it from falling more into the hands of foreign owners; *Business News Americas*, "BNDES Looking at Steel Sector Consolidation," Sept. 2, 2003.

a new company, known as JFE, in a deal completed in April 2003. Japan's remaining three largest steel companies have formed a cooperative alliance.⁵⁸

Among Asian steelmakers, **China** has been a declining factor in the U.S. import market, not a major direct cause of U.S. industry problems. After shipping 1.4 million MT of steel to the United States in 2000, China shipped less than 750,000 MT in 2001, less than 700,000 MT in 2002, and an annual rate below 600,000 MT in the first half of 2003. Also, unlike Turkey, India and several other countries that U.S. producers claim have been abusing the developing countries' exemption from the Bush safeguard measures, China did not receive such an exemption, so its exports are fully subject to the safeguard, as well as to U.S. AD/CVD laws.

The role of China in the future of the U.S. steel industry is primarily an indirect one. China has become both the world's largest producer and largest importer of steel, fueled by its booming domestic industrial economy. In 2002, China produced 182 million MT of steel, to lead the world, reportedly, in production for the seventh straight year; estimates are that it will top 200 million MT in production in 2003. But it also imported more than 24 million MT of rolled steel, to become the leader in that category as well (U.S. total steel imports of nearly 30 million MT in 2002 included about 8 million MT of semi-finished products).⁵⁹ The major suppliers to China included a wide range of Asian and European producers, but the most important are from Japan, Korea and Taiwan, explaining why these producers are less interested today in the slower-growth U.S. market. For example, "POSCO ships about a quarter of its production to China; for [Taiwan's] China Steel, it's about 15%."⁶⁰ U.S. companies have also joined in this export boom; ISG and Steel Dynamics each reported about 150,000 tons sent to China through the first half of 2003, contributing to the recent small boom in U.S. steel exports reported earlier.⁶¹

But this rapid industrialization of China may also have some negative effects. The first is the rapid build-up of new capacity in China, plus the maintenance of old capacity, which is now outdated and should be retired; one estimate is that China now has more than 1,000 steel mills, many dating back to the Maoist industrial drive of the 1960s. Shanghai-based Baosteel has been estimated to control about 10% of production and is shown in Table 2 as one of the world's top steel producers, but otherwise, control is highly fragmented among state-owned enterprises and speculative private sector companies.⁶² The rapid increase in capacity can create temporary or permanent capacity overhangs, depending on the course of Chinese growth. The issue has created serious concern within China's own government and industry leaders, who have publicly expressed caution about industry overexpansion.

⁵⁸ On JFE see esp. *AMM*, Oct. 14, 2002 print ed. See also *AMM*, December 5, 2001 and January 3, 2002; *Financial Times*, Dec. 23, 2001 and April 8, 2002.

⁵⁹ Statistics reported in *DER*, "China Surpasses U.S. as World's Largest Importer of Rolled Steel, Official Data Show," July 14, 2003.

⁶⁰ *Forbes.com*, "Let the Good Times Roll," May 12, 2003.

⁶¹ *AMM*, "The Year of the Double-Edged Dragon," August 25, 2003 print ed.

⁶² *Asia Pulse* has produced a brief but comprehensive summary of the industry, "Profile – China's Iron and Steel Industry," (October 2003).

The minister in charge of the State Development and Reform Commission, for example, noted with concern that investment in the Chinese iron and steel industry increased by 130% just in the first six months of 2003.⁶³

The growth in demand and capacity also contributes to a rising price of scrap, coke and other inputs to feed demand in China and among other Asian steel companies. This squeezes U.S. producers between increasing world market prices for inputs, which they are not able to pass through because domestic market demand is still weak for their output.⁶⁴ Another indirect effect is that China's steel consumers are rapidly expanding their manufactured goods output into global as well as domestic markets. There are concerns that China's fixed currency exchange now seriously undervalues its industrial exports, thus taking business from U.S. companies and ultimately weakening the domestic steel industry's customer base.⁶⁵

Other formerly centrally planned economies are represented in Figure 4 by **Ukraine** and **Russia**, each with around 1.3-1.4 million MT of exports to the United States in 2000. Imports from Russia initially bucked the general downward trend and increased steadily in 2001-2, but declined to an annual rate of less than 300,000 MT in the first half of 2003. Imports from Ukraine fell sharply throughout the period.

In Russia, Ukraine, and perhaps other former Soviet republics such as Moldova, the collapse of the Soviet Union has left major domestic industries without big government-financed projects that provided major markets for their steel. So now they look to the global market, including the United States.⁶⁶

U.S. imports from Russia are governed by an agreement suspending U.S. antidumping duties on covered products in exchange for limits on Russian shipments, negotiated under the Clinton Administration as a resolution to an antidumping case. The Bush Administration has declared Russia a "market economy," which changes the basis of calculating margins and subsidies for AD/CVD cases. The Bush Administration has been negotiating new suspension agreements and quotas for Russian semi-finished products under the Section 201 remedies.⁶⁷ In a new twist on changes in the Russian steel industry, one of its largest producers, Severstal, has

⁶³ See esp. the quote from ISG executive in *ibid*, and the same article plus *AMM*, July 28, 2003 print ed. for details on the structure of the Chinese industry. Government concerns about overinvestment in the domestic steel industry are quoted in *Business Daily Update*, "Chinese Government Warns of Overheating in the Steel Industry," Aug. 13, 2003; *SinoCast China Business Daily News*, "Four Cautions to China's Iron and Steel Industry," Aug. 13, 2003; Economist Intelligence Unit -Business China, "China Changing Gear," Sept. 1, 2003.

⁶⁴ Global Insight. *Monthly Steel Report*, May, 2003, pp. 1-2 and Aug. 2003, p. 1.

⁶⁵ Sixteen Members of Congress reportedly sent a bipartisan letter in July 2003 to President Bush, complaining about China's policy on this issue; *New York Times*, Aug. 26, 2003. See reports in *Washington Post*, Sept. 1, 3 and 4, 2003, and *AMM*, Sept. 3-4, 2003, on the efforts of U.S. Treasury Secretary John Snow to convince the Chinese government to allow its currency to float upward.

⁶⁶ Section 3.1 of *Global Steel Trade*.

⁶⁷ See, for example, *DER*, "Commerce Finalizes Suspension Pact with Russian Producers of Carbon Steel Plate" (Jan. 7, 2003).

entered negotiations to buy Rouge Steel, a Detroit-area integrated mill, out of bankruptcy. Rouge was originally built to provide Ford with an in-house integrated supplier, and still is a major producer for the U.S. automotive industry.⁶⁸

The United States imports steel from many other sources and these imports fared variously under the Section 201 tariff regime. Imports from **India** dropped sharply from nearly 1 million MT in 2000 to only about 200,000 MT in 2001, but then more than tripled in 2002, as India was exempted from most safeguard tariffs. Stainless steel and flat-rolled U.S. carbon and alloy steel have especially complained to the White House about Indian import surges. **South Africa** and **Australia** saw smaller declines, though imports from the former were increasing rapidly in mid-2003. Possibly assisted by a falling currency exchange rate, imports from **Turkey** increased, against the general trend, by 41% to almost 900,000 MT in 2001, and to 1.2 million MT in 2002; Turkey has also received a general developing country exemption .

There are many reasons for the attractiveness of the U.S. market for international steel producers. In a period of slow global growth and a strong dollar, many analysts believe, the U.S. market has become a safety valve for a systemic overcapacity that is distinctive for this industry. Gary Hufbauer and Ben Goodrich of the Institute for International Economics note that integrated steel mills have high fixed costs, so that “it makes sense for struggling steel firms to continue running their plants so long as the marginal revenues from extra production at least cover variable costs ... economic logic differs somewhat for minimills ... but while [they] account for a big share of U.S. steel production ... their share of global production is much smaller. The world steel industry is still characterized by integrated steel producers and their overcapacity problems.”⁶⁹ Guy Dolle, the head of Arcelor, the world’s largest steel company, estimated that “Overcapacity in the world steel industry is close to 15%, principally because of subsidies and protectionism ... overcapacity has risen over the past 15 years.”⁷⁰

The consolidation, which is now taking hold in the American steel industry, is partly a response to the consolidation and globalization that is ongoing at the international level. **Table 2** displays a listing by the *Financial Times* of the world’s largest steel companies, as of 2002, and how U.S. companies are moving into the table.

⁶⁸ Reuters, “Rouge Files Bankruptcy – Russia’s Severstal Agrees to Buy” (Oct. 23, 2003); “Troubled Dearborn, Mich. Steel Giant Files Chapter 11, Plans Sale,” *Detroit Free Press* (Oct. 24, 2003); Micheline Maynard and Erin Arvedlund, “The Russians Are Coming to Take Over Rouge Steel,” *New York Times* (Oct. 25, 2003). Saying that “The first one in the door is not always the first one out the door,” U.S. Steel CEO Thomas Usher has indicated his company’s continuing interest in competing for Rouge; Jeff Bennett, “U.S. Steel CEO Discusses Possibility of Buying Bankrupt Detroit Steelmaker,” *Detroit Free Press* (Oct. 28, 2003); *AMM*, Oct. 29, 2003.

⁶⁹ Hufbauer and Goodrich, *Steel: Big Problems*, p. 3.

⁷⁰ Guy Dolle, “The Steel Industry Must Lead by Example,” *Financial Times* (Sept. 29, 2003).

Table 2. World's Largest Steel Companies
(2002 production in MT millions)

1	Arcelor (Luxembourg)	44
2	LNM (Netherlands)	32
3	POSCO (S. Korea)	28
4	JFE (Japan)	26.5
5	Nippon Steel (Japan)	26
6	Baosteel (China)	19
6	ThyssenKrupp (Germany)	19
8	Corus (UK/Netherlands)	16
8	ISG/Bethlehem (US)	16
10	Riva (Italy)	15*
11	Nucor (US)	14
12	U.S. Steel	14

*2001 data.

Source: *Financial Times*, April 9, 2003 Special Report.

Arcelor, which combined the assets of leading French, Spanish and Luxembourg steel companies, is by far the world's largest steel company. LNM Group, a global steel industry group put together by Indian industrial magnate Lakshmi Mittal, which is headquartered in Britain and the Netherlands and includes the U.S. company Ispat Inland Steel⁷¹, is now in second place, nosing out POSCO and the new Japanese combination of JFE. Most of the remaining steel companies in the table are also consolidations of previously independent companies, such as: ThyssenKrupp, formerly Germany's two largest steel producers; Corus, which combined British Steel with Hoogovens of the Netherlands; and ISG, whose takeover of Bethlehem was anticipated but not completed when the table was prepared. The table does not include the more recent U.S. Steel acquisition of National Steel, which would move it up to the same size scale as ThyssenKrupp and China's Baosteel.

Also, as indicated in the table, consolidation and cooperation are increasing across borders. The new U.S. "big three" are all actively participating. U.S. Steel has been most aggressive. Table 2 includes not just the North American capacity of U.S. Steel, but also the four-million-MT capacity of its Slovakian affiliate, known as USSK, acquired in 2000. U.S. Steel has continued to move aggressively in eastern Europe, having recently acquired Sartid Steel of Serbia, with more than two million

⁷¹ However, Ispat Inland is a publicly traded company, and not included in the same management group as other LNM steel interests, which are privately held; "The King of Steel," *Business Standard*, Sept. 27, 2003. "Ispat" is the Sanskrit word for steel.

MT in capacity, but lost to LNM in its effort to purchase Poland's largest steelmaker, PHS, which is being privatized. ISG owner Wilbur Ross has bid for bankrupt Korean steelmaker Kia, though the company claims there would be no direct management linkage between the U.S. and Korean operations.⁷² Nucor's joint venture activities in Brazil were mentioned above, and it has also been involved in international joint ventures to develop and employ a new smelting process to improve the quality of iron ore for steel mills.⁷³

Steel Industry Employment and the Legacy Cost Issue

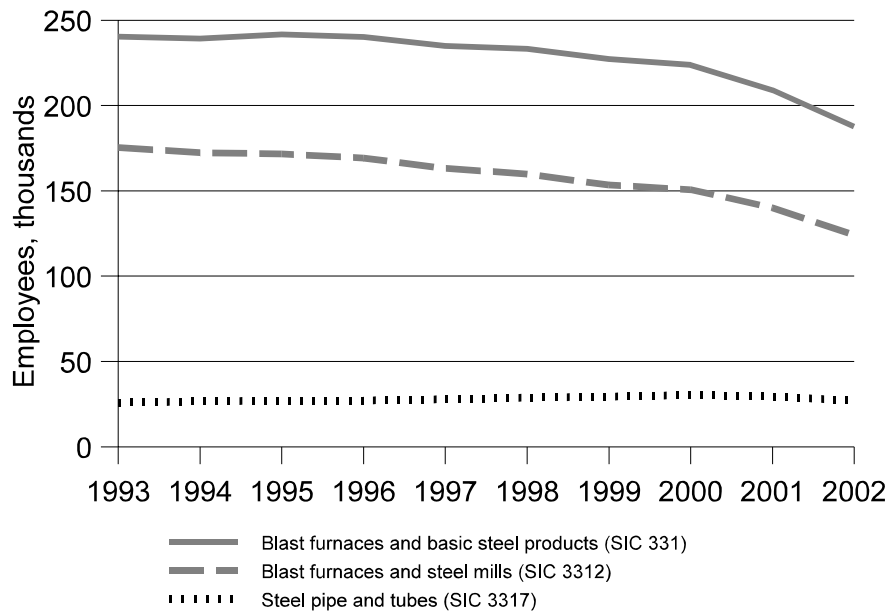
The loss of jobs in the steel industry is almost an iconic issue symbolizing declining employment in traditional industries, as the industry has consistently shed jobs over the past three decades. The reasons relate to a whole range of issues – not just import competition, but also productivity improvements and changes in the market for steel products. **Figure 5** illustrates the change in employment in the steel industry since 1993, after the United States recovered from the previous recession.⁷⁴ It is based on the industry employment series published by the Bureau of Labor Statistics annual average employment data by industry.

The first thing to note is that employment in the steel industry overall, defined as “blast furnace and basic steel products” (SIC 331), slowly but steadily declined throughout the 1990s, from 240,300 employees in 1993, to 223,900 employees in 2000. This included a one-year decline of 3,400 employees in 2000, the second-highest year ever for total domestic steel production. The total fall in employment in 1993-2000 was a decline of 7%. By comparison, however, the decline was accelerated by the recession that started in 2001. In two years, it fell by 16% to 187,600 employees.

⁷² The recent international activities of U.S. Steel and ISG are summarized by Michael Arndt in *Business Week*, “Up from the Scrap Heap” (July 21, 2003) pp. 44 and 47. U.S. Steel's acquisitions in eastern Europe are discussed in Bob Jones, “The Blood Sweat and Bonds Fueling US Steel's Euro-Ambitions,” *AMM* (Sept. 29, 2003 print ed.), p. 6. The same edition carries a story by Tom Balcerek (“Globalization's a Goner,” pp. 3 and 6), discussing a “retreat” of European steelmakers from the U.S. market. On the Ross bid for Kia Steel, see *New York Times*, May 27, 2003.

⁷³ *Charlotte Observer*, August 30, 2003.

⁷⁴ Note that the totals in Figure 5 approximate, but do not match, the data used in Figure 3, which is gathered by the Census Bureau on a different basis. Also, BLS is in the process of changing its categorizations from the Standard Industrial Classification (SIC) to the new North American Industry Classification System (NAICS). The data in Figure 3 is closest to SIC 3312 in Figure 5. Total industry employment in Figure 5 is on a broader basis.

Figure 5. Steel Industry Employment

Source: U.S. Dept. Of Labor. Bureau of Labor Statistics. National Employment, Hours, and Earnings. (www.bls.gov)

Moreover, the figure shows that the situation is far worse, if we just focus on “blast furnaces and steel mills” (SIC 3312), leaving out such activities as pipe and tube making, which use raw steel made in the “hot end” of mills. Between 1993 and 2000 employment at the mills that produce “raw steel” fell from 175,400 to 150,700 persons – a decline of 14% even before the 2001-2 industry recession. In 2001-2, employment fell by another 18% to 124,200 persons. Altogether, 50,000 jobs were eliminated in basic steelmaking over the decade, a number that accounted for nearly all of the net loss of jobs in the steel industry. By contrast, steel pipe and tubes *increased* employment by 18% (nearly 5,000 jobs) between 1993 and 2000, then lost about 10% of those jobs in 2001-2, but ended up with 1,400 more jobs in 2002 than in 1993.

“Legacy costs,” and how they are to be met in any restructuring of the U.S. steel industry to meet international competition, have colored the political debates over steel issues. Legacy costs may be defined as pension and health care benefit provisions of steel worker contracts, which provide benefits beyond those that are available through public entitlements, and which are funded by earnings of steel companies. These benefits were negotiated, especially at unionized integrated steel companies heavily affected by job losses, to encourage workers to accept rationalization and productivity improvements that were deemed necessary to keep these companies competitive. USWA president Leo Gerard in May 2003 estimated that retiree health care alone could add \$10 to \$25 to the cost of a ton of steel,

roughly 5% to 10% of its market price.⁷⁵ He estimated the number of affected retirees to 600,000 in a letter to Members of Congress dated January 15, 2002.

Many of these integrated steel companies have gone into bankruptcy and some even into liquidation, leaving retirees facing loss of benefits. Acquiring companies were interested in maintaining existing operations on an ongoing basis, but had no interest in supporting large numbers of retirees. The legacy cost issue has been an important one for both current and future beneficiaries of steel industry pension and health care plans, and for potential acquiring parties of integrated steel mills suffering financial distress. But the latter issue for the largest integrated companies has been resolved by PBGC takeover of some integrated steel company pension plans. Under this arrangement, retirees may lose their health care benefits, but in some cases they will be partially compensated by new Trade Adjustment Assistance (TAA) provisions in the 2002 Trade Act (P.L. 107-210), and supplemented by provisions negotiated in collective bargaining on new labor agreements.⁷⁶

Retirement pensions were already protected under federal law. The LTV pension plans were taken over as of March 31, 2002, by the PBGC. This move has protected the pensions of 82,000 LTV workers, retirees and dependents, insofar as they are eligible under PBGC rules. PBGC estimates that about half the total \$4.4 billion LTV pension liability was unfunded, so the net cost to PBGC was about \$2.2 billion.⁷⁷ PBGC also declared insolvent and took over two smaller steel company pension plans later in 2002, Republic Technologies and Geneva Steel.

In December 2002, PBGC declared the pension funds of National Steel and Bethlehem Steel insolvent, and announced steps to take them over as well. In the case of National Steel seven separate pension funds were involved, covering 35,000 workers and retirees. The net liability for PBGC was \$1.1 billion, at that time making it the second-largest PBGC takeover.⁷⁸ This action was soon overshadowed by the PBGC declaration on December 16, 2002, that Bethlehem Steel's pension fund was insolvent and that the PBGC was taking it over. Covering 95,000 workers and retirees, the Bethlehem Steel pension fund was found to be only 45% funded, with \$3.5 billion in assets covering \$7.8 billion in liabilities; PBGC calculated that its net liability is for \$3.7 billion.⁷⁹

The net costs of these steel industry pension takeovers, plus the decline in the market value of PBGC assets, eliminated PBGC's actuarial surplus by the end of 2002. As of the end of 2001, PBGC had reported a surplus of \$7.7 billion, down

⁷⁵ *AMM*, May 15, 2003.

⁷⁶ Details of the health care assistance for recipients of pensions from PBGC are in CRS Report RL31593, *Health Insurance for Displaced Workers*, by Julie Stone *et al.*

⁷⁷ Pension Benefit Guaranty Corporation press release. "PBGC Protects Benefits of 82,000 LTV Workers in Largest-Ever Federal Pension Takeover" (Mar. 29, 2002).

⁷⁸ PBGC news release. "Federal Pension Insurer Moves to protect Benefits of 35,000 at National Steel"(Dec. 5, 2002); *South Bend Tribune*, Dec. 6, 2002.

⁷⁹ PBGC news release. "PBGC to Protect Pensions of 95,000 at Bethlehem Steel" (Dec. 16, 2002).

about \$2 billion over the previous year. After the LTV action, in June 2002, the agency was quoted as reporting to Congress a surplus of \$4.8 billion.⁸⁰ But when PBGC closed the books on FY 2002, its total losses for the year, including actual and “probable” assumptions of underfunded pension funds, stock market losses and lower interest earnings, were \$11.4 billion, leaving \$25.4 billion in assets to cover \$29.1 billion in liabilities. \$9.3 billion in FY 2002 losses, including the eventual National and Bethlehem pension fund assumptions of December 2002, foreseen as “probable” losses, were due to takeovers of failing private pension plans. By far, steel has been the largest part of the problem. “Steel, with less than 3% of participants, has accounted for 58% of PBGC’s claims,” noted PBGC Executive Director Steven Kandarian in Senate testimony in March 2003. The airline industry was a distant second, with 13% of claims.⁸¹

In view of this rapid deterioration of the PBGC’s financial situation, the General Accounting Office on July 23, 2003, designated PBGC as a “high risk” agency or major program requiring urgent attention and possible statutory reform.⁸² Comptroller General David Walker and Kandarian testified on September 4, 2003, before the House Committee on Education and the Workforce at a hearing to examine this subject. Walker stated that a particular concern was that the PBGC had responsibility for securing pensions in a disproportionate number of pension plans in traditional industries, such as steel, which have been seriously and adversely affected by international competition.

The reactions of the companies and the USWA were sharply negative to the National and Bethlehem pension fund takeovers by the PBGC. Although it was not contested that the pension funds were insolvent and would eventually have to be taken over by the PBGC, the companies had apparently hoped to be able to utilize them in covering some legacy costs of laid-off workers as they restructured for bankruptcy reorganization or acquisition. The timing of the PBGC action was therefore a surprise and was heavily criticized by both companies.⁸³ Leo Gerard of the USWA also reacted negatively. On the National pension fund takeover, he said, “In this era of unbridled corporate greed, we are disappointed, but not surprised, that the PBGC has acted to limit its own liability rather than to fulfil its mandate to protect the pension benefits of workers and retirees” And in the case of Bethlehem he said, “This pre-empts our ability to negotiate with an employer It’s not the government’s business to force consolidations through the PBGC.”⁸⁴

⁸⁰ *Ibid.* “PBGC Records \$7.7 Billion Surplus Despite Higher Claims in 2001” (Apr. 8, 2002); *DER*, “Correction Notice” (October 30, 2002).

⁸¹ U.S. Senate. Committee on Finance. “Statement of Steven A. Kandarian” (March 11, 2003), p. 7.

⁸² GAO. “Pension Benefit Guaranty Corporation’s Single Employer Insurance Program: Long-Term Vulnerabilities Warrant ‘High Risk’ Designation,” GAO-03-1050spn (July 23, 2003).

⁸³ See *AMM*, Dec. 9, 2002; Bethlehem Steel Corp. “Bethlehem Unhappy with Timing of Pension Plan Termination,” press release, Dec. 16, 2002; *Wall St. Journal*, Dec. 17, 2002; *Washington Post*, Dec. 17, 2002.

⁸⁴ Quotations from *AMM*, Dec. 10 and 18, 2002.

The USWA argues that the major integrated companies are at a competitive disadvantage against domestic companies that do not face legacy costs or foreign manufacturers whose governments already provide health care to steelworkers through national health care plans. Domestic companies that operate minimills, such as Nucor, have a younger work force, few retirees, and no unfunded post-retirement obligations.⁸⁵ USWA supported action such as that proposed by members of the Senate Steel Caucus, which wrote President Bush on February 8, 2002 that the total costs to federal, state and local governments of relief of workers who face reduced pensions and lost health care benefits through bankruptcies might be equal to or greater than government support of industry legacy cost burdens.⁸⁶

But beyond the provisions described above as part of the 2002 Trade Act, Congress took no further action. Gerard in May 2003 testified before the Senate Appropriations Committee's Labor, HHS and Education subcommittee that the only real solution was to "repair" fundamentally the U.S. health care system, or to replace it with one like the Canadian "single-payer" model.⁸⁷

The USWA and steel companies have also addressed the subject in collective bargaining agreements. A tentative ISG-USWA agreement was reached in December 2002, which reportedly includes many changes from previous USWA steel industry contracts, notably "a fund to provide health care for retirees of LTV steel." Moreover, Wilbur Ross, head of ISG was quoted as saying "This agreement will facilitate our acquisition of Bethlehem Steel or other steel companies," clearly implying that this was the "template" for a new contract.⁸⁸ After the U.S. Steel acquisition of National Steel, the USWA negotiated an apparently similar deal with the consolidated company, replacing the old National and U.S. Steel contracts.⁸⁹

⁸⁵ USWA. *Domestic Steelmakers: Retiree Health Care Legacy Costs*. no date.

⁸⁶ Letter of Senate Steel Caucus to President George W. Bush, February 8, 2002.

⁸⁷ *AMM*, May 15, 2003.

⁸⁸ *AMM*, December 24, 2002.

⁸⁹ *AMM*, May 21, 2003.

Effects on Steel Consuming Industries

Even before President Bush announced that he would take a Section 201 case on steel imports to the ITC, representatives of steel consuming industries expressed concerns regarding the impact of trade relief for the steel industry. The Consuming Industries Trade Action Coalition (CITAC) in particular responded negatively to the 201 case and pointed out that an earlier study it had commissioned found that steel import quotas could cost “as much as \$2.34 billion annually or up to \$565,000 per steel job.”⁹⁰ Jon Jenson, President of CITAC, was quoted as saying that the problem of legacy costs was due to bad decisions made by the heads of integrated steel mills. “They made promises they can’t keep. Why should the taxpayers and the steel users be made to feel guilty over promises they can’t keep?” Import remedies, he claimed, would add 15 to 20% to steel prices.⁹¹ CITAC issued a follow-up report, *The Unintended Consequences of U.S. Steel Import Tariffs: A Quantification of the Impact During 2002*, in 2003, which controversially estimated that “200,000 Americans lost their jobs to higher steel prices during 2002 ... [representing] approximately \$4 billion in lost wages from February to November 2002.” The paper assigned to the safeguard tariffs a major role in the increase in steel prices, though it did not specify the number of jobs lost due to the tariffs, as distinct from other factors that contributed to higher steel prices (notably steel mill closures) and the general effects of an economic recession.⁹²

The steel industry responded sharply, arguing that the benefits commitments were made in good faith, but no one anticipated the surge of cheap imported steel into the U.S. market in the late 1990s because of global overcapacity. After the 2003 CITAC paper was released, AISI immediately attacked the CITAC methodology and conclusions in a response issued by its chairman, Dan DiMicco, CEO of Nucor. DiMicco stated that both CITAC and Labor Department data showed that total employment in U.S. metal-consuming businesses actually increased by 229,000 jobs in 2002.⁹³ DiMicco also responded to charges of higher prices resulting from the safeguard tariffs by noting, “Prices for hot-rolled sheet in the U.S. right now are considerably lower than they are in China, Taiwan, Japan and the U.K., just to name a few examples.”⁹⁴

Complaints from U.S. businesses about high steel prices and short supplies started being received as the Section 201 tariffs went into effect and steel prices rose in the first half of 2002. The House Small Business Committee heard testimony from business executives and workers in small manufacturing enterprises that steel price

⁹⁰ CITAC press release, June 5, 2001.

⁹¹ *AMM*, August 27, 2001.

⁹² Dr. Joseph Francois and Laura Baughman, *The Unintended Consequences of U.S. Steel Import Tariffs: A Quantification of the Impact During 2002* (CITAC Foundation, Washington, DC, February 4, 2003).

⁹³ AISI, press release, Feb. 5, 2003.

⁹⁴ AISI, *Steelworks News Digest*, Feb. 4, 2003. For further background on this dispute, see *AMM*, February 11, 2003.

rises of 50% or more and supply shortages, both coincident with the Section 201 tariffs, were having a serious negative effect on steel consuming industries.⁹⁵

The issue of steel price increases, whether or not they are principally or directly caused by the Section 201 remedy tariffs, also may have influenced the process of excluding nearly a quarter of potentially covered import volume from the Section 201 tariffs in the “exclusion” process included by President Bush as part of his Section 201 remedy actions. The Section 201 safeguard tariffs are scheduled to remain in effect for three years – and each year, on the anniversary date of the implementation of the initial safeguards (March 5), President Bush will also review whether additional products should be added to the exclusion list. But Under Secretary of Commerce for International Trade Grant D. Aldonas at a Small Business Committee hearing refused to consider any early termination of the Section 201 tariffs outside the annual review process, though he stated that the exclusion list could be modified, if steel suppliers are shown to have used false or fraudulent information in successfully objecting to product exclusions.⁹⁶

Pursuant to these hearings Representative Joe Knollenberg and six co-sponsors introduced on October 9, 2002, a resolution that urged the President to request the ITC to conduct an early review of the safeguard measures and to include consideration of impact on consuming industries (the ITC is required to review the impact of Section 201 tariffs eighteen months after their initiation, in this case by September 2003). No action was taken before the 107th Congress adjourned, but a modified version of the resolution (H.Con.Res. 23) was introduced in the 108th Congress. Ultimately, House Ways and Means Committee Chairman William Thomas and Senate Finance Committee Chairman Charles Grassley requested under Section 332 of U.S. trade law that the ITC prepare a report on the impact steel safeguards on consuming industries, conjointly with the Section 201 “mid-point” review on the impact on the producing industry. This request was accepted by the ITC, which released the reports together in September 2003.⁹⁷

This report has been discussed earlier, with respect to its analysis of steel prices. In Chapter 4 of the Section 332 report on the impact on consuming industries, the ITC analyzed “economy-wide effects” of the steel safeguard remedy through use of a computable general equilibrium (CGE) model, a simulation device. The ITC found that while the tariffs generated an estimated \$650 million in annual government revenue, the impact on the private sector economy was negative overall. It found that the net impact on the steel industry and its suppliers was about a \$300 million positive improvement in income, against which the impact on consuming industries

⁹⁵ U.S. Congress. House. Committee on Small Business. *The Unintended Consequences of Increased Steel Tariffs on American Manufacturers*. Hearings, 107th Cong., 2nd Sess., Parts 1-2, July 23 and Sept. 25, 2002 (hereafter House Small Business Committee). Committee chair Don Manzullo introduced as evidence also a series of articles on the problem from a newspaper in his district, the *Rockford Register-Star* (July 21, 2002).

⁹⁶ House Small Business Committee, Part 2 (Sept. 25, 2002), pp. 5-11. *DER*, “Commerce Official Rebuffs Call to End Steel Tariffs; Leverage Cited,” (September 26, 2002).

⁹⁷ The legislative maneuvering regarding this request is discussed in CRS Report RL37192, *Steel: Legislative and Oversight Issues* (updated Jul. 30, 2003), by Stephen Cooney, pp. 4-9.

was a negative \$600 million. The overall estimate of impact on labor was a net loss of income of \$386 million; the net negative impact of the safeguards on the private sector in this model was therefore about \$680 million.⁹⁸

In a recently released report, Gary Hufbauer and Ben Goodrich of the Institute for International Economics commented on the ITC findings, and compared them with other estimates and analyses. While they believe that the ITC underestimated the impact of the safeguard tariffs on steel prices and note that CGE model results may vary widely depending on initial assumptions, Hufbauer and Goodrich emphasize that “the conclusion is that the safeguards are *unambiguously* [emphasis in original] a drag on the U.S. economy.” Measured in terms of job loss, they find the net impact of the ITC’s numbers imply a net job loss of 12,000, though they are certain that the impact is probably higher, in the range of 26,000-43,000 jobs (note that this may not mean actual jobs lost, but loss of overtime, reduced hours, and other net negative impacts on earnings by workers).⁹⁹

Conclusion and Outlook

Since neither the general situation of the economy nor other specific policy measures between 1998 and 2001 resolved dire financial problems within the steel industry, President Bush was encouraged to adopt safeguard tariff measures provided under Section 201 of U.S. trade law. Some said that under a period of temporary protection, the industry would hunker down behind tariff walls and conduct business as usual, then plead for continued protection when the tariffs were eliminated in three years, but this did not happen.

The minimill side of the U.S. industry, whose output now roughly equals that of the older integrated industry, has moved aggressively to consolidate and restructure operations. After a period of delay, as it sought an acceptable formula of legacy cost relief, the integrated industry has also moved decisively to consolidate ownership. An additional question, which Members of Congress encouraged the ITC to consider, is whether the interests of steel consuming industries are being negatively affected by the Section 201 policy. The ITC’s answer was that the net impact of the remedy measures may be negative for private sector industry, though perhaps not by the order of magnitude suggested in earlier studies supported by steel users.

The big issues with respect to the shape of industry restructuring may now shift to the international side. First, the WTO Dispute Settlement Panel ruled the Administration’s use of Section 201 as incompatible with global trade rules. On November 10, 2003, the Bush Administration’s appeal against this decision was reportedly rejected by the WTO Appellate Body. How and in what time frame will the Administration change the safeguard measures in view of this decision? Secondly, the Administration has been conducting international negotiations with

⁹⁸ ITC Publ. 3632, Vol. 3, pp. 4-1 to 4-5, esp. Table 4-3.

⁹⁹ Gary C. Hufbauer and Ben Goodrich, *Next Move in Steel: Revocation or Retaliation?* (Institute for International Economics Policy Brief no. PB03-10, October 2003), pp. 9-10.

other significant producers in the forum of the Steel Committee of the Organization for Economic Cooperation and Development. These negotiations have sought to address the elimination of excess steel capacity worldwide, as well as governmental subsidies to the steel industries. These two problems have been considered by both the Bush and the Clinton Administrations as the root causes of long-term problems in the steel industry. Can the Administration bring back meaningful resolution of these problems through international negotiations?