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## Steel: Price and Policy Issues

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## Steel: Price and Policy Issues

### Abstract

[Excerpt] The rapid growth of steel production and demand in China is widely considered as a major cause of continued high steel prices and prices of steelmaking inputs. Steel companies have achieved much greater pricing power, in part through an ongoing consolidation of the industry. High prices persist, despite the revocation in 2003 of President Bush's broad safeguard order on imports. U.S. steel production in 2006 was 108 million tons. The integrated side of the industry continues to lose share domestically to the minimills. Imports rebounded in 2006 to reach the highest tonnage level ever, though they declined in 2007. Input prices, especially ferrous scrap and iron ore, remain high, meaning higher costs, which have been largely passed along to industrial consumers. China now produces 40% of the world's steel and is the world's largest steelmaker and steel consumer. This contributed to a large global increase in demand for both steel and steelmaking inputs. China has become a large net exporter as well. In 2006, its steel exports to the U.S. market more than doubled, and it became the second-largest import source. Congress became increasingly concerned over allegedly unfair trade competition from China, and has considered many proposals to deal with these issues. In the 110th Congress, bills were introduced to allow penalty tariffs to offset a country's manipulation of its currency exchange rate for trade advantage. The Commerce Department undertook a countervailing duty case against China, and the U.S. government also brought a case in the World Trade Organization against China over subsidies, including subsidization of steel exports. The U.S. steel industry sponsored in 2007 a report that detailed alleged government subsidies to the Chinese industry. The U.S. International Trade Commission (ITC) has terminated some trade remedy cases and orders against imported steel products. But in other cases, orders have been upheld, and new cases are proceeding. President Bush decided in a China safeguard case not to provide relief for domestic producers of steel pipe, despite a positive ITC determination. The Byrd Amendment, under which domestic steel producers receive distributions of trade remedy duties, was repealed by P.L. 109-171, and is no longer in effect from October 1, 2007. Internationally, the Organization for Economic Cooperation and Development has abandoned the effort to achieve an international agreement to ban subsidies for steel mills. In April 2006 the World Trade Organization, (WTO) Appellate Body ruled against the "zeroing" methodology used by the U.S. Commerce Department in calculating dumping margins.

### Keywords

steel, production, public policy, imports, exports, China, United States, subsidies, trade

### Disciplines

Economics | Social and Behavioral Sciences

### Comments

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# CRS Report for Congress

## Steel: Price and Policy Issues

Updated October 31, 2007

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Resources, Science, and Industry Division



Prepared for Members and  
Committees of Congress

# Steel: Price and Policy Issues

## Summary

The rapid growth of steel production and demand in China is widely considered as a major cause of continued high steel prices and prices of steelmaking inputs. Steel companies have achieved much greater pricing power, in part through an ongoing consolidation of the industry. High prices persist, despite the revocation in 2003 of President Bush's broad safeguard order on imports.

U.S. steel production in 2006 was 108 million tons. The integrated side of the industry continues to lose share domestically to the minimills. Imports rebounded in 2006 to reach the highest tonnage level ever, though they declined in 2007. Input prices, especially ferrous scrap and iron ore, remain high, meaning higher costs, which have been largely passed along to industrial consumers.

China now produces 40% of the world's steel and is the world's largest steelmaker and steel consumer. This contributed to a large global increase in demand for both steel and steelmaking inputs. China has become a large net exporter as well. In 2006, its steel exports to the U.S. market more than doubled, and it became the second-largest import source.

Congress became increasingly concerned over allegedly unfair trade competition from China, and has considered many proposals to deal with these issues. In the 110<sup>th</sup> Congress, bills were introduced to allow penalty tariffs to offset a country's manipulation of its currency exchange rate for trade advantage. The Commerce Department undertook a countervailing duty case against China, and the U.S. government also brought a case in the World Trade Organization against China over subsidies, including subsidization of steel exports. The U.S. steel industry sponsored in 2007 a report that detailed alleged government subsidies to the Chinese industry.

The U.S. International Trade Commission (ITC) has terminated some trade remedy cases and orders against imported steel products. But in other cases, orders have been upheld, and new cases are proceeding. President Bush decided in a China safeguard case not to provide relief for domestic producers of steel pipe, despite a positive ITC determination. The Byrd Amendment, under which domestic steel producers receive distributions of trade remedy duties, was repealed by P.L. 109-171, and is no longer in effect from October 1, 2007.

Internationally, the Organization for Economic Cooperation and Development has abandoned the effort to achieve an international agreement to ban subsidies for steel mills. In April 2006 the World Trade Organization (WTO) Appellate Body ruled against the "zeroing" methodology used by the U.S. Commerce Department in calculating dumping margins.

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# Steel: Price and Policy Issues

## Introduction

With growing demand at home and abroad, the domestic steel industry is strong and profitable, but also more subject to globalized ownership and international competitive pressures. Many American businesses are concerned by a long-term increase in the price of steel that has resulted from these trends. Some Members of Congress were once concerned that the steel safeguard tariffs, imposed in 2002 by President Bush under the terms of Section 201 of U.S. trade law, could have been keeping steel prices artificially high. Before those tariffs were terminated on December 4, 2003, the costs of raw materials and other inputs in steelmaking rose, thus creating a cost-driven increase in the price of steel. After the tariffs were removed, the price increase nevertheless accelerated. On the other hand, after decades of implementing efficiency improvements while struggling to be profitable, many steel companies in 2004 found themselves making more money than in many years. Higher steel prices for consuming industries since then have been exacerbated by global economic growth, which increased demand for steel.

In 2005 the rate of growth of U.S. industrial output moderated, and the price of steel, domestic steel output, and steel mill companies' earnings all declined. But the growth of China contributed to a large increase in global demand for both steel and steelmaking inputs, thus keeping the cost of domestic steel high. China has become both the world's largest steelmaker and steel consumer. China also became a net exporter of steel, including such a large increase of exports to the U.S. market that it became the second-largest national import supplier in 2006.

Since 2005 a number of policy decisions have adversely affected the interests of domestic steel producers:

- The Organization for Economic Cooperation and Development (OECD) abandoned its efforts to negotiate an agreement among all major steel-producing countries to ban domestic subsidies for steel mills.
- Congress approved and President Bush signed into law a federal deficit reduction bill repealed the Continued Dumping and Subsidy Offset Act ("Byrd Amendment"), under which many domestic steel producers received distributions of antidumping and countervailing duties charged on imports.
- The U.S. International Trade Commission (ITC), in two five-year sunset reviews of existing trade remedy tariffs on widely traded products, decided in December 2006 that the threat of material injury

to domestic producers no longer existed from imports of cut-to-length steel plate or from imports of corrosion-resistant cold-rolled steel from most countries, and thereby eliminated the subject remedy duties.

- The ITC decided in late 2006 that domestic steel wire rod producers were not materially injured, and thereby terminated an antidumping case brought by domestic steel companies against imports from China, Turkey, and Germany.
- President Bush decided in a special trade safeguard case not to provide trade relief for domestic producers of steel pipe against imports from China.
- The World Trade Organization (WTO) Appellate Body in April 2006 ruled that the so-called “zeroing” methodology used by the U.S. Commerce Department in calculating dumping margins violates WTO rules, when used in administrative reviews. The Commerce Department has modified its assessments in a way that led to lower dumping margins in steel industry cases.

But in decisions that were more positive for the steel industry in sunset reviews of antidumping and countervailing duty (AD-CVD) orders, the ITC decided to keep most penalty duties on hot-rolled, line pipe and reinforcing bar imports, though it eliminated AD duties on many steel products used by the domestic petroleum industry. Furthermore, the Bush Administration announced in February 2007 that it was taking a case against China to the WTO under the organization’s rules on prohibited subsidies. The U.S. domestic steel industry has complained about pervasive and continuing government subsidies of Chinese producers. In its announcement, the U.S. government explicitly included steel among the Chinese industries that had benefitted from subsidies. Both steel producers and steel consuming industries have complained that China manipulates its exchange rate to enhance its trade competitiveness, and a number of bills have been introduced in Congress that would define China’s exchange rate policy as a distortion of trade and subject to U.S. retaliatory measures.

Whatever the net impact of these policy developments, the price of steel is generally double or triple the price when steel safeguards were introduced in 2002. Although costs of steelmaking inputs have also increased, as this report describes in detail, the steel industry as a whole has become highly profitable, in direct contrast to its condition just a few years earlier.

Profitability may be partly the result of global industry consolidation. Two of the four largest U.S. steelmakers are now foreign-owned, as opposed to none of the top 10 steelmakers being foreign-owned less than 15 years ago. There is also only one significant Canadian-owned steelmaker left, and it is in the process of being acquired by U.S. Steel. Most of the industry in Mexico is now owned by companies from outside North America. ArcelorMittal, the world’s largest steelmaker, with operations on virtually every continent, is now also the largest steel producer in North America, though U.S. Steel may regain the lead. Some American companies,



particularly U.S. Steel, have also expanded abroad, but to a much lesser extent than foreign investment here. While financially stronger and more profitable than at any time in the last generation, the steel industry in the United States and North America is also far more internationalized in its ownership. Moreover, while the sustained high price of steel has encouraged a spate of plans and actual new construction of steel mills, in virtually all cases the mills are being financed and controlled by foreign interests.

## **Current State of the Steel Industry**

### **U.S. Production and Employment**

The sharp rise in demand for steel, plus the consolidation of the industry, led to higher steel prices and profits almost across the board in the industry in 2004. But in 2005, production, prices and apparent domestic consumption all declined. The resurgence of supply in 2004 coincided with a dramatic rise in domestic steel prices. As production declined with demand in 2005, prices also declined. But they remained historically strong, and fell nowhere near the levels seen before the imposition of trade safeguard remedies in 2002. In 2006 overall prices remained high, even as domestic production increased significantly and imports set an all-time record.

Despite the volatility in steel prices over the past decade, domestic steel output has remained surprisingly constant. Since 1997, U.S. domestic raw steel production has only been more than 110 million net tons in one year (2000), and less than 100 million tons also in just one year (2001). In 2004, output increased from 103 million tons to nearly 110 million tons, as U.S. mills benefitted from a worldwide recovery in demand and prices. Then output fell back a little, to less than 105 million tons in 2005, before recovering again to more than 108 million tons in 2006. Capacity utilization (defined in the industry as “capability utilization”) declined from 94.6% in 2004 to stabilize at 87.5% in 2005-06.<sup>1</sup>

As prices have now remained strong for an extended period, several new U.S. mills or expansions of existing mills are being completed or are on the drawing board.<sup>2</sup> It remains to be seen if this leads to an extended period of long-term growth in domestic capacity. The restructuring and consolidation of the steel industry, which is detailed below, has, according to many analysts, led to greater control over production. This has led to higher prices as demand increased.<sup>3</sup>

---

<sup>1</sup> American Iron and Steel Institute (AISI). *Annual Statistical Report*, 2006, Tables 23 and 25. All tonnage figures in this CRS report are “short tons” (2,000 lbs.), as commonly used in the U.S. steel industry. The exception in this report are international data, which are reported in metric tons (MT, or “tonnes”) that are about 10% larger.

<sup>2</sup> *Wall St. Journal*, “Steel’s Latest Hot Spot: The U.S.” (August 14, 2007), p. A10. New U.S. steel mill investments are discussed in the following section.

<sup>3</sup> See, for example, John Anton of Global Insight, “Steel Makers in U.S. Acting Responsibly, (continued...) ”

Through the first part of 2007, overall prices remained high, as declining demand and prices for automotive steels were offset by higher prices in some other products. Total shipments of steel mill products were down by 4% through August 2007 and capacity utilization slipped to 86.1%, but the industry has continued to be highly profitable, both domestically and globally.<sup>4</sup>

Though production has been stable in recent years, the relationship between the two steelmaking technologies used in the United States has dramatically reversed in terms of market shares. **Figure 1** illustrates the changing patterns of U.S. steel supply. Integrated mills produce steel from iron ore, using coke and other inputs. They are characterized by unionized workforces and, in competing with both minimills and imports, have been absorbing high levels of employee and retiree benefit costs.<sup>5</sup> The production of the large integrated mills using basic oxygen furnace (BOF) technology (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 after 2000. The integrated side of the industry has consolidated by closing older operations and increasing productivity. In 2004, production from integrated mills increased 4% to 52.6 million tons, but in 2005 it decreased to 47.1 million tons, the lowest level from this type of furnace since 1982. In 2006, BOF output fell again to 46.4 million tons. Integrated mills remain the sole source of certain high-volume products, such as external sheet for automobiles, and U.S. motor vehicle production has been on a down trend for the past two years.

Minimills employ electric-arc furnaces (EAFs), a newer technology. They have overtaken integrated mills as the leading source of steel by tonnage in the United States, and are now virtually the only domestic source of “long” products, such as concrete reinforcing bars, steel wire rod, and construction beams. Although they may use various forms of iron ore input, most minimills rely primarily on steel scrap, which they remelt. The minimill sector is largely non-union, and, by contrast with the integrated mills, provides defined-contribution employee pension packages instead of benefits defined by union contract.<sup>6</sup>

Minimills steadily increased production after the recession of 1991 and gained market share. **Figure 1** shows that 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. Minimill output fell significantly in 2001, then recovered steadily. In 2006, annual minimill production exceeded 60 million tons for the first time, and accounted for 57% of U.S. output, compared to 43% for the integrated mills — almost exactly the reverse of the situation 10 years earlier.

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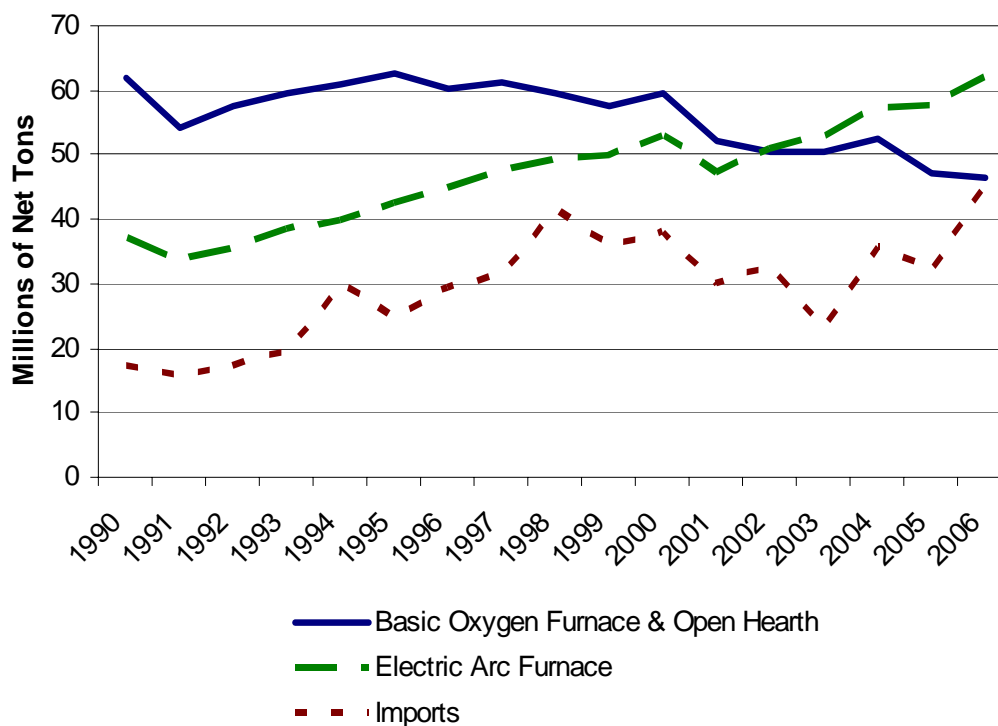
<sup>3</sup> (...continued)

Rest of the World Needs to Join,” *Steel Monthly Report* (November 2006), pp. 1-2.

<sup>4</sup> Data from American Iron & Steel Institute(AISI), “Selected Steel Industry Data” (August 2007).

<sup>5</sup> The so-called “legacy cost” issue is discussed detail in CRS Report RL31748, *The American Steel Industry: A Changing Profile*, pp. 25-29. See also CRS Report RL33169, *Comparing Steel and Automotive Industry Legacy Cost Issues*.

<sup>6</sup> The best-known business model in the minimill industry, that of Nucor Inc., the largest EAF producer, is described in detail in *Business Week*, “The Art of Motivation” (May 1, 2006), pp. 57-62.

**Figure 1. Sources of U.S. Steel**

**Source:** American Iron & Steel Institute. *Annual Statistical Reports*.

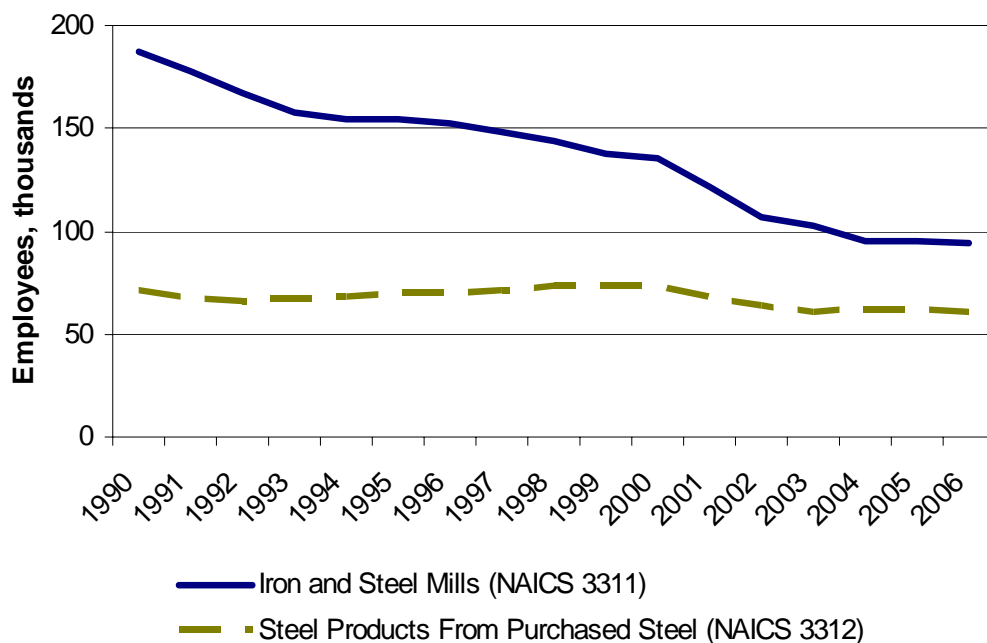
**Figure 1** also shows the level of imports, which has been somewhat erratic, but on an upward trend and reached an all-time record in 2006. They increased steadily in the 1990s, then surged in 1998 to more than 40 million tons. The movement of imports has been up and down since that peak. During the application of safeguard tariffs, imports fell in 2003 to 23.1 million tons, the lowest level since 1993. Once the safeguards were removed, and given strong domestic demand, imports increased more than 50% in 2004, to 35.8 million tons. Imports in 2005 fell back to 32 million tons. But they increased again to a new record of 45.1 million tons in 2006. Part of the reason, as is observed later in the discussion of prices, is the shift in the structure of demand toward products used in energy and industrial production, even as demand for flat steel in the auto and appliance industries softened. Another major shift in the 2006 was in the sources of U.S. imports, as is discussed below. Through August 2007, imports declined about a quarter by tonnage, according to the American Iron and Steel Institute.

This figure does not show the rising significance of steel exports as a share of total U.S. steel production. This has become increasingly significant as the decline in the exchange rate of the U.S. dollar against most foreign currencies. While exports of steel mill products were around 5-6 million tons between 1997 and 2002, the export trend began to strengthen in 2003, and reached 9.7 million tons in 2006.<sup>7</sup> While imports declined substantially through early 2007, exports increased by 10%,

<sup>7</sup> AISI. 2006 *Annual Statistical Report*, Table 14.

and had risen to one-third the level of imports for the year.<sup>8</sup> But the overall bulk of U.S. steel exports are to the North American Free Trade Agreement partners, Canada and Mexico. Of 9.7 million tons exported in 2006, 6.1 million tons went to Canada, and another 2.2 million tons to Mexico. Together, they accounted for 85% of all U.S. steel mill exports.<sup>9</sup>

**Figure 2. Employment in the U.S. Steel Industry**



**Source:** U.S. Department of Labor. Bureau of Labor Statistics.

The recovery of the steel industry was reflected in steel mill employment levels in 2005, as measured under the North American Industry Classification System (NAICS 3311). As reported in average annual employment levels by the Bureau of Labor Statistics, 2005 was the first year since 1990 that employment in the industry did not decrease (**Figure 2**). It grew marginally from 95,400 to 95,700, despite continued progress in both the minimill and integrated sectors in reducing the worker-hours required to produce a ton of steel.<sup>10</sup> This compares to an overall decline of almost 50% in steel mill employment since 1990, which had occurred year by year, whatever the economic conditions in the industry. The only difference had been slower decline in the mid-1990s, as opposed to a faster decline during and after the late 1990s, when the industry was under heavy pressure from imports or low demand levels because of recessionary conditions. In 2006, employment attrition resumed, at a slow pace, to 94,400 steel mill employees.

<sup>8</sup> AISI. "Selected Data" (August 2007).

<sup>9</sup> AISI. 2006 *Annual Statistical Report*, Table 16.

<sup>10</sup> Employees per thousand tons of steel mill shipments have declined by almost half since 1990, from 1.93 to 1.11 in 2006. AISI, *Annual Statistical Report 2006*, chart in executive summary.

**Figure 2** also illustrates employment levels in industries that fabricate steel products from primary steel produced elsewhere (NAICS 3312). This includes rolling mills, and pipe and tube producers. These data showed a little more fluctuation with domestic macroeconomic trends than employment in the mills that make steel. By 1995, employment regained the level of 70,000 seen in 1990, and by 2000 it had increased to more than 73,000. The recession of 2001, followed by the increased price of raw steel after late 2003, saw the annual employment level decline to about 60,000.

## North American and Global Steel Industry Consolidation

One of the stated purposes of the presidential action of 2002 on steel safeguards was to effect a restructuring of the domestic steel industry.<sup>11</sup> To a great extent, that restructuring has been achieved. There are now two dominant players among integrated steel mill companies in the United States and North America, and two clear market leaders among the minimill producers. Moreover, the leading North American and global producer, Mittal Steel, in 2006 acquired the global number-two producer, Arcelor.<sup>12</sup> The recovery of pricing power in the domestic industry may be attributable to industry consolidation, as well as to rising global demand spurred by China. But, ironically, the establishment of industry pricing power, plus the rise of global demand and steel prices and the falling exchange rate of the dollar, have also made establishment of new production facilities in the United States an attractive proposition.

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<sup>11</sup> “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” (March 5, 2002) in *Message to Congress* (House Doc. 107-185), March 6, 2002, p.56.

<sup>12</sup> Both companies are headquartered in western Europe, although Mittal Steel’s production assets were widely distributed around the world, including Indonesia, Kazakhstan, South Africa, Poland, Ukraine, South Africa, Mexico and the United States. Arcelor was itself the result of consolidation of two French-owned steel companies, the Luxembourg steel company and a Spanish steel company. Arcelor’s global assets included control of CST of Brazil, the world’s largest merchant exporter of semi-finished slab steel. It had no U.S. production assets, though it acquired the leading Canadian producer, Dofasco, in January 2006. See: Bloomberg.com, “Mittal Makes \$22.7 Bln. Unsolicited Bid for Arcelor” (January 27, 2006); *Wall St. Journal*, “Arcelor Transfers Dofasco Unit to Block Takeover” (April 5, 2006), p. A3; *Wall St. Journal*, “Arcelor Assails Mittal’s Structure” (May 4, 2006), p. C4; *Wall St. Journal*, “Profits Decline at Mittal, Arcelor as They Continue Takeover Duel” (May 13, 2006), p. A2; and, “Arcelor Expected to Reject Higher Mittal Bid That Evens Voting Rights” (May 20, 2006), p. A3; *AMM*, “Arcelor Trips Mittal with Severstal Deal” (May 30, 2006). On accession of the Arcelor board to Mittal’s increased offer in June 2006, see *Wall St. Journal*, “Arcelor Agrees to Acquisition by Rival Mittal” (June 26, 2006), p. A3, and “Arcelor Shareholders Accept Mittal Takeover Offer” (online ed., July 26, 2006); and, *Chicago Tribune*, “Steelmakers Forge Merger Deal” (June 26, 2006), p. 1. For a detailed analysis of the implications and impact of a Mittal-Arcelor deal on the global steel market, see *Economist*, “Age of Giants” (February 4-10, 2006), pp. 55-56; and, “Little Love Lost” (July 1, 2006). Lakshmi Mittal’s account of his own business strategy is in *Wall St. Journal*, “Big Steel” (August 3, 2006), p. A6.

**Table 1** shows the results of global consolidation in the industry in recent years, and the relative position for leading companies in the United States, Canada, and Mexico. The table includes the world's 20 leading producers, then all of the other top producers in North America, whether they are domestic- or foreign-owned. The table reveals that not only is the largest steelmaker in North America a company based outside the region, but also that recent and pending acquisitions have put much of the domestic industry in the hands of foreign-owned companies. Locally owned Canadian and Mexican steel companies have virtually disappeared or are disappearing.

**Table 1. Top Global and North American Steel Producers**

	Global Rank	HQ Country	Makes Steel in N.Am.?	2006 Output (MT mils.)
ArcelorMittal <sup>a</sup>	1	Lux.	Y	117.98
Nippon Steel	2	Japan	N	32.91
POSCO	3	Korea	N	31.20
JFE Steel	4	Japan	Y	32.20
Tata Steel <sup>b</sup>	5	India	Y	23.95
Shanghai Baosteel	6	China	N	22.59
U.S. Steel	7	USA	Y	21.25
Nucor	8	USA	Y	20.31
Tangshan	9	China	N	19.06
Riva	10	Italy	N	18.19
AO Severstal	11	Russia	Y	17.60
ThyssenKrupp	12	Germany	Y <sup>c</sup>	16.80
Evrast Holding Group <sup>d</sup>	13	Russia	N	16.10
Gerdau	14	Brazil	Y	15.57
Anshan	15	China	N	15.00
Jiangsu Shagang	16	China	N	14.63
Wuhan Iron & Steel Group	17	China	N	13.76
Sumitomo	18	Japan	N	13.58
Steel Authority of India Ltd.	19	India	N	13.50
Techint Group	20	Argentina	Y	12.83
SSAB/Ipsco <sup>e</sup>	39	Sweden	Y	7.21
BlueScope Steel	43	Australia	Y	6.83
AK Steel	50	USA	Y	5.65
Essar/Algoma Steel <sup>f</sup>	54	India	Y	5.19
Steel Dynamics	63	USA	Y	4.26
Stelco <sup>g</sup>	71	Canada	Y	3.81
Altos Hornos de Mexico	79	Mexico	Y	3.36
Commercial Metals Co.	88	USA	Y	3.09
Vallourec	95	France	Y	2.79
Acerinox	105	Spain	Y	2.58
Wheeling-Pittsburgh Steel	113	USA	Y	2.27

**Source:** Adapted from *Metal Bulletin* (March 12, 2007) for data on tonnage and global rankings.

- a. Includes total 2006 production of both Arcelor and Mittal Steel.
- b. Acquired Corus Group of UK/Neth. in Apr. 2007, incl. U.S specialty steel operations; output is combined total for 2006.
- c. Produces stainless steel at operation in Mexico.
- d. Acquired Oregon Steel; combined 2006 output.
- e. Ipsco agreed to acquisition by SSAB in Jun. 2007; combined 2006 output.
- f. Algoma Steel of Canada agreed to acquisition by Essar in Jun. 2007 — combined 2006 output; Essar has also acquired Minnesota Steel, a new mill being built in the Mesabi iron range.
- g. Agreed to acquisition by U.S. Steel (Aug. 2007).

**ArcelorMittal: Global Industry Giant.** At the top of the table is ArcelorMittal, whose combined 2006 output of 118 million MT was three times that of any other company. Lakshmi Mittal, an entrepreneur originally from India, has been building a global steel empire with operations in places as varied as Poland, South Africa, and Central Asia. With completion of the Arcelor deal, Mittal controls a combined company that produces 10% of global steel output.<sup>13</sup> Among Mittal's earlier acquisitions was a U.S. integrated steel mill, Inland Steel. He also acquired a major Mexican producer, the integrated steel works on the Pacific coast at Lazaro Cardenas. But his major coup in becoming the leading North American steelmaker was the acquisition of the International Steel Group (ISG). This occurred after the North American steel industry had nearly collapsed with more than three dozen bankruptcies after 1998. About one-third of the companies on earlier lists of leading U.S. and Canadian steel mill operators in 2002-2003 disappeared from independent existence, either having gone out of business or merged into other companies.

The first bankruptcy that started a consolidation process was that of LTV Steel, which became the foundation for ISG in 2002, when financier Wilbur L. Ross led a group that bought the company out of liquidation. Ross put together a steel empire under the ISG name that soon came to challenge U.S. Steel as the largest U.S. integrated steel producer. He acquired another venerable, but bankrupt, producer, Bethlehem Steel, in 2003. In 2004, ISG acquired Weirton Steel, a former National Steel spinoff that had tried to survive as an independent, employee-owned corporation, but was finally forced to sell out after 20 years. Ross' group also acquired a South Carolina minimill operation, Georgetown Steel, which had gone into bankruptcy twice in recent years. Ross' group was not responsible for the pension and health care legacy costs of the acquired companies. The underfunded pension funds of bankrupt steel producers were taken over by the Pension Benefit Guaranty Corporation (PBGC), an entity chartered by Congress, while retirees lost their company-sponsored health care benefits. Ross also negotiated new labor contracts with the United Steelworkers (USWA) and other unions representing the integrated mills. These agreements conflated the number of job descriptions within integrated mills and otherwise streamlined the organization of labor within plants.<sup>14</sup> But ISG's own days as an independent operator were short-lived.

In 2004 Ross reached an agreement with Mittal, under which the latter's global holdings were first consolidated as Mittal Steel, then merged with the holdings of ISG in April 2005 for a payment of about \$4.5 billion to Ross and other ISG shareholders. Thus, Mittal Steel became the largest domestic U.S. steel producer, considering both the ISG acquisition and its previously owned Inland Steel operations, as well as the largest in the world.<sup>15</sup>

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<sup>13</sup> *Wall St. Journal*, "Arcelor Agrees to ... Mittal" (June 26, 2006); Bloomberg.com, "ArcelorMittal Buys Villacero Mill for \$1.4 Billion" (December 20, 2006).

<sup>14</sup> For a quick summary of steel legacy cost developments, see CRS Report RL33169, *Comparing Automotive and Steel Industry Legacy Cost Issues*, esp. pp. 6-7 and 12-13. An earlier and more detailed account is in CRS Report RL31748, *The American Steel Industry: A Changing Profile*.

<sup>15</sup> Ispat International N.V., Ispat International to Acquire LNM Holdings to Form Mittal (continued...)

In approving the subsequent ArcelorMittal merger under U.S. antitrust law, the Justice Department did indicate a concern with how the deal would affect the tinplate market. Ultimately, Justice determined that ArcelorMittal would have to dispose of its Sparrows Point integrated steel mill (formerly owned by Bethlehem Steel) near Baltimore. In August 2007, it was announced that Sparrows Point would be sold to a joint venture led by Esmark, which had also acquired Wheeling-Pittsburgh Steel (see below), with participation by companies from Brazil and Ukraine.<sup>16</sup> Mittal Steel also decided in 2005 to end steelmaking operations at Weirton, though tin-coating operations there are continuing.<sup>17</sup>

**North American Restructuring Affects Other U.S. Companies.** Only two other companies with major operations in the United States are among the top 10 globally — U.S. Steel and Nucor, the two largest U.S.-headquartered companies. Both have substantially increased the global scale of their operations through acquisitions made during the period of low prices and difficult operating conditions after 2001. They are respectively seventh and eighth on the global list, with each producing more than 20 million metric tons worldwide in 2006.

Historically, the largest domestic steelmaker had been U.S. Steel, the integrated steelmaking company that had held the title for a century until 2002. It significantly expanded its domestic operations, and took an important step in the domestic consolidation process, when it acquired another major integrated company, National Steel, out of bankruptcy in 2003. As in the creation of ISG, U.S. Steel only made this acquisition after PBGC declared National Steel's pension fund insolvent and took it over. Also, U.S. Steel used the new pattern of labor relations with the USWA, established earlier by ISG in its dealings with the union, to write a new labor contract for all its U.S. steelmaking operations — both the continuing U.S. Steel plants and the newly acquired National Steel facilities.<sup>18</sup>

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<sup>15</sup> (...continued)

Steel Co. — International Steel Group to Merge with Mittal Steel for Cash and Stock,” news release (October 25, 2004); *Washington Post*, “Steelmaker to Be Sold for \$4.5 Billion” (October 26, 2004), p. E1; *Wall St. Journal*, “Deal Would Create No. 1 Steelmaker” (October 26, 2004); *Financial Times*, “Mittal Plan to Create First Global Steel Group” (October 26, 2004); and “Merger Reveals Details of Mittal Empire” (October 29, 2004); *Business Week*, “A New Goliath in Big Steel” (November 8, 2004), pp. 47-8; and, “The Raja of Steel” (December 20, 2004), pp. 50-2.

<sup>16</sup> *Wall St. Journal*, “Mittal Sells Mill in U.S. as Part of Arcelor Deal” (August 3, 2007), p. A6; *AMM*, “Esmark Joint Venture to Buy Sparrows Point Mill” (August 3, 2007); and, “Justice Asking for Trustee to Sell Sparrows Point Mill” (August 8, 2007).

<sup>17</sup> *Ibid.*, “Mittal Tells Weirton Plant: Tin Is In, But Furnace Out” (December 15, 2005); and, “Mittal Formally Announces Weirton Plant's Shutdown” (January 2, 2006). In 2007, ArcelorMittal announced closure of all operations except the tinplate mill at Weirton; *ibid.*, “Arcelor Mittal to Shut Weirton Hot-Strip Mill” (October 19, 2007), p. 6.

<sup>18</sup> The story of U.S. Steel winning a takeover battle for National against AK Steel, with the support of the USWA, was described as it unfolded in *AMM*, January 10, 13, 24 and 27; February 3 and 10; April 21 and May 21, 2003; See also, Bloomberg.com, “AK Steel Makes Rival \$1.02 Billion Bid for National Steel” (January 23, 2003). On the USWA role in (continued...)



In 2007, U.S. Steel made other major North American acquisitions, purchasing Lone Star Technologies, a specialist in producing tubular steel products, for \$2.3 billion and Stelco, the last major independent Canadian steelmaker (see below). The takeover of Stelco would increase U.S. Steel's North American steelmaking capacity to more than 25 million tons, enough to make it again the leading producer on the continent. U.S. Steel is also the U.S. domestic steelmaker that has been most active in expansion abroad in recent years, having acquired a large integrated mill in Kosiče, Slovakia (now known as USSK) and another in Serbia. With the Stelco acquisition, U.S. Steel would have more than 30 million MT in global steel capacity, enough to move up in **Table 1** to fifth place among world steel companies.<sup>19</sup>

All of the net expansion in U.S. production in recent years has occurred in the minimill sector. Nucor is the leading U.S. minimill operator. Before the creation of ISG, it temporarily became the largest domestic steel producer in 2002, passing U.S. Steel. It now operates 18 mills in 13 states, and poured more than 20 million MT of steel in 2006. In recent years, Nucor has expanded mostly by acquisitions, notably through buying financially struggling Birmingham Steel Corporation out of a "prepackaged" bankruptcy in 2002. Birmingham Steel at that time was the second-largest U.S. minimill operator.<sup>20</sup>

The second-largest minimill operator in North America is GerdauAmeristeel, the subsidiary of a company based in Brazil. While in 2006 it produced only about a third of the tonnage of Nucor in the domestic market, it has clearly distanced itself from the remaining minimill companies and is the other major U.S. minimill consolidator. Gerdau in 2002 acquired a Canadian-based company with U.S. minimill operations, Co-Steel, plus one mill from Birmingham Steel. It consolidated these mills together with its own North American operations to create Gerdau Ameristeel, operating in both the United States and Canada. Then, in 2004, Gerdau acquired North Star Steel, controlled by Cargill Inc., which was seeking to exit the steelmaking business.<sup>21</sup> In July 2007 GerdauAmeristeel also announced that it had reached agreement on a \$4.2 billion deal to acquire Chaparral Steel, a company with minimills in Texas and Virginia, and which is a major competitor in the market for structural beams.<sup>22</sup>

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<sup>18</sup> (...continued)

reorganizing the industry and renegotiating labor contracts more generally, see *AMM*, December 24, 2002, January 8, 2003 and "A Template for Change" in January 20, 2003 print ed., pp. 2-4; *Business Week*, "Salvation from the Shop Floor" (February 3, 2003), pp. 100-01.

<sup>19</sup> On these acquisitions, see *AMM*, "U.S. Steel Completes Purchase of Lone Star" (June 18, 2007), p. 6; U.S. Steel, "U.S. Steel Agrees to Acquire Stelco," press release (August 26, 2007); *AMM*, "U.S. Steel Agrees to Buy Stelco in \$1.1 Billion Deal" (August 28, 2007).

<sup>20</sup> For a summary of Nucor's acquisitions and other developments, including Gerdau's expansion, in consolidation of minimill operations, see *AMM*, "Out of Easy Targets, Buyers Are Beginning to Look Upstream" (February 7, 2005 print ed.), pp. 10-11.

<sup>21</sup> *AMM*, September 10 and November 3, 2004.

<sup>22</sup> *Wall St. Journal*, "Gerdau Sets Deal to Acquire Chaparral Steel" (July 11, 2007), p. A10; (continued...)

A result of this consolidation is that two companies based outside North America, Mittal, the largest operator of U.S. integrated steel mills, and Gerdau, the second-largest operator of U.S. minimills, together control between a quarter and a third of annual North American industry output. This is an historic change for a domestic industry that had been almost exclusively North American-based.<sup>23</sup>

In effect, the industry is highly integrated across North America. There are no tariffs or trade barriers across the borders under terms of the North American Free Trade Agreement. Although imports from Canada and Mexico are fully subject to U.S. antidumping and countervailing duties, they were exempted by President Bush from the safeguard tariffs, and therefore achieved share gains in the U.S. market. Also, the USWA, the major union in the industry, operates in both the United States and Canada. It is not present in Mexico, where government interference in union affairs was a major issue in 2006.<sup>24</sup>

The smaller integrated steel mills have almost disappeared as independent entities under the wave of international consolidation. Rouge Steel, originally founded by Henry Ford to supply his Detroit motor vehicle manufacturing operation, was acquired by a large Russian company, Severstal. The company subsequently rose to the eleventh position in world steel production rankings in 2005, as shown in **Table 1**. As part of Arcelor's efforts to fend off potential acquisition by Mittal, Severstal's CEO, Alexei Mordashov, agreed in May 2006 to merge his company with Arcelor, which would have made the combined company the new top global steel producer. Mordashov was to take a 32% share of the combined company, with the right to appoint one-third of the directors, but Arcelor's shareholders ultimately approved the merger with Mittal and rejected the deal with Severstal.<sup>25</sup> While this deal failed, Severstal has taken the major financial interest in building a new minimill in Mississippi (see below).

The remaining U.S. independent integrated mills are:

- *AK Steel* (no. 50 on the global list), a widely diversified steel product manufacturer with integrated steel operations.
- *Wheeling-Pittsburgh* (no. 113) had been bankrupt, but used an Emergency Steel Loan Guarantee to secure financing to build a new

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<sup>22</sup> (...continued)

*AMM*, "Ameristeel Agrees to Buy Chaparral for \$4.22 Billion" (July 12, 2007).

<sup>23</sup> A good summary list of all industry takeovers and mergers through early 2005 is in Timothy J. Considine, *The Transformation of the North American Steel Industry* (April 2005, available through American Iron and Steel Institute, Washington, DC), tab. 3.

<sup>24</sup> The Mexican government effectively removed from office Napoleon Gómez Urrutia, head of the Miners and Metalworkers union, by recognizing as its head a dissident rival. It charged Gómez with malfeasance and misuse of funds. He has legally challenged this action, amid strong national protests against the government, and has been supported internationally by the AFL-CIO and the USWA. A detailed report is in *AMM*, "A Deposed Leader Ignites the Labor Reform Movement in Mexico" (March 13, 2006, print ed.), p. 12.

<sup>25</sup> *AMM*, "Severstal Vote Clears Way for Arcelor-Mittal" (July 3, 2006).

minimill, and also become an operator of both technologies.<sup>26</sup> Losing money again, despite a steel market that has remained strong and relatively stable, Wheeling-Pitt became the object of a takeover battle between Brazil's CSN and Esmark, a steel distribution company. It was eventually acquired by the latter.<sup>27</sup>

- *WCI Steel* of Warren, Ohio (not on list) reorganized out of bankruptcy in May 2006.
- *Republic Engineered Products*, not on the list and also based in Ohio, now specializes in bar products, primarily for the automotive industry, and operates both an integrated mill and a minimill. The company is the successor of Republic Steel, founded by Cyrus Eaton in 1930. It has gone through several major changes in recent decades, including operation as an employee-owned company and two periods of bankruptcy. In 2005, Republic was acquired by Industrias CH, a company based in Mexico.<sup>28</sup>

Steel Dynamics and Commercial Metals (CMC), on the bottom half of the global list, are U.S.-based minimill operators. Two foreign-owned companies with significant U.S. steelmaking operations are also in the lower end of the table. Vallourec (no. 95) is the French-based parent of V&M, a tube-making specialist that operates a minimill in Youngstown, Ohio. Acerinox of Spain is listed 105<sup>th</sup> because it specializes in stainless steel, a low-volume but high-value product. Its North American Stainless plant in Kentucky is the largest stainless steel plant in the United States.

In another acquisition by a foreign steelmaker in the U.S. market, Evraz, a Russian producer that ranked behind Severstal as the thirteenth global producer in **Table 1**, acquired Oregon Steel in a \$2.3 billion friendly takeover bid. The target was a minimill producer based in Portland. Oregon Steel did not rank among the largest U.S. minimill companies, but it was the last independently owned steelmaker on the West Coast. The deal makes the combined company the world's largest rail producer (the main product of Rocky Mountain Steel Mills in Colorado, which is owned by Oregon Steel).<sup>29</sup> Oregon Steel also operates one of the few mills in North

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<sup>26</sup> *Ibid.*, August 4 and September 10, 2003; March 8, 2004 print ed.

<sup>27</sup> The outcome is summarized in *ibid.*, "New Executive Team in Place at Wheeling-Pitt" (December 22, 2006).

<sup>28</sup> *Cleveland Plain Dealer*, "Mexican Company Buys Republic Engineered" (July 23, 2005), p. C1.

<sup>29</sup> *Financial Times*, "Evraz Group to Buy Oregon for \$2.3 Billion," and "Combination Will Dominate Rail Market" (November 21, 2006); *AMM*, "Evraz Buy of Oregon Steel Fills Void at Both Producers" (November 21, 2006). Aspects of the deal reportedly concerned the Committee on Foreign Investment in the United States, the multiagency Executive Branch body that reviews acquisitions by foreign-owned companies with respect to national security issues; *ibid.*, "Evraz-Oregon Steel Deal Raising Questions in DC" (December 13, 2006). But it ultimately was allowed to go through; *ibid.*, "Evraz Given 'Go' to Pursue \$2.3B Buy of Oregon Steel" (January 11, 2007); and, "Oregon Steel Purchase Complete" (January 25, 2007), p. 6.

America capable of producing large-diameter pipe, necessary for building long-distance natural gas pipelines.<sup>30</sup>

**Building New U.S. Mills.** While international consolidation has brought more ownership from overseas to the U.S. and North American market, it has also increased interest in building new steel production facilities in the United States. Partly this can be explained by higher steel prices and exchange rate developments that make dollar-based production more favorable. But probably the main driver is the interest of major foreign-owned companies in establishing a larger presence in the domestic market. With the major assets already acquired by competitors, the alternative is to establish new production.

- The biggest new project is the plan of Germany's ThyssenKrupp, number 12 on the list in **Table 1**, to build a new mill in Alabama at an estimated cost of nearly \$3 billion, in order to have steelmaking capacity close to U.S. automotive assembly plants. This mill will primarily roll semi-finished steel slab that the company will import from a joint venture plant being built in Brazil.<sup>31</sup> The project followed ThyssenKrupp's failure to acquire the Canadian steel company Dofasco (see below).
- With the same target of supplying the southern U.S. auto assembly plants, a new minimill in eastern Mississippi is already starting production. Severstal is the primary financial source and controlling owner of the new plant, which is being managed by John Correnti, former CEO of Birmingham Steel.<sup>32</sup>
- There is also the Minnesota Steel project, originally financed locally, to build a new steel mill on the Mesabi range, and to utilize directly the taconite produced at a nearby mine. Essar Global Ltd., a leading steel company in India, in 2007 acquired the project.<sup>33</sup>

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<sup>30</sup> See CRS Report RL33716, *Alaska Natural Gas Pipelines: Interaction of the Natural Gas and Steel Markets*.

<sup>31</sup> These developments are summarized in *Ibid.*, "ThyssenKrupp Launching New Strategies for Growth" (August 14, 2006); "TK to Step Up US Plans; Court Nixes Dofasco Plea" (January 24, 2007); and, "Alabama Picked as Site of TK's New Steel Plant" (May 14, 2007). TK also plans to melt and roll stainless steel at the new plant, for shipment to its Mexican stainless steel facility for further processing.

<sup>32</sup> *Ibid.*, "SeverCorr Rising" (December 5, 2005 print ed.), pp. 4-5; "SeverCorr Goes Hot, Produces First Steel Sheet" (August 30, 2007); and, "Severstal Sold on SeverCorr, US Steel Market" (October 25, 2007).

<sup>33</sup> *Minneapolis Star-Tribune*, "Iron Range's New Steel Plant Deal Is Sealed" (October 25, 2007); *AMM*, "Essar's \$1.65B Minnesota Steel Buy Completed" (October 26, 2007), p. 7. Note, however, that Minnesota Gov. Tim Pawlenty has threatened to block the transaction because of concern with Essar's reported plan to build a large oil refinery in Iran; *ibid.*, "Minn. Leader Tosses Wrench in Essar's Iron Range Plans" (October 30, 2007).

- Magnitogorsk Iron & Steel Works (MMK), a Russian company, filed plans in 2007 with the state regulators in Ohio to build a 1.0 to 1.5 million ton annual capacity minimill on the Ohio River near the town of Haverhill. In the views of some analysts, MMK's plans remain a bit vague.<sup>34</sup> MMK is not listed in the global table above, but in the source for the table, it ranked twenty-third as a global steel producer in 2006 with 12.5 million MT.
- Vaguer than the MMK proposal is an otherwise unidentified "group of European investors" also reported to be interested in building a "billion-dollar-plus" steel mill in Ohio.<sup>35</sup>

**Local Ownership Ends at Canadian and Mexican Mills.** Another feature of the table is the virtual disappearance of Canadian companies from the list. One of the two largest and the most profitable, Dofasco, in January 2006 was the target of a takeover battle between two large European-based companies, Arcelor and ThyssenKrupp.<sup>36</sup> Ultimately, control was acquired by Arcelor, which then placed Dofasco in a trust operated by a Netherlands-based foundation to make more difficult the parent company's hostile takeover by Mittal. Mittal had agreed to sell Dofasco to ThyssenKrupp, if it acquired Arcelor, but the deal was blocked by the Dutch trust.<sup>37</sup>

Canada's largest minimill operator was also acquired by a company based outside North America. Ipsco had moved its headquarters to Illinois, but its origins were in western Canada, and it maintained operations in both countries. On May 3, 2007, it announced agreement on a friendly acquisition by Svenskt Stal AB (SSAB), a producer of high-value and specialty steel products.<sup>38</sup> The 2006 output of the two companies rank their combined output 39<sup>th</sup> among global steel companies.

In another friendly acquisition of a Canadian company, Essar of India acquired Algoma Steel, based in Sault Ste. Marie, Ontario, in a \$1.7 billion deal. The Essar-Algoma combination ranks 54<sup>th</sup> in **Table 1**, based on more than five million MT in 2006 output. Thus, the Algoma acquisition is part of Essar's plan to operate integrated operations in the upper Great Lakes region.<sup>39</sup>

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<sup>34</sup> *Ibid.*, "Ohio May Be Near to Landing Mill Project" (October 8, 2007), p. 4; and, "MMK Mill Plan Is Bigger, Bolder Than Anticipated" (October 22, 2007).

<sup>35</sup> *Ibid.*, "Second Group Eyes \$1-Billion Ohio Steel Mill" (October 23, 2007).

<sup>36</sup> For example, see *ibid.*, January 4 and 10, 2006.

<sup>37</sup> See *Wall St. Journal*, "Arcelor Transfers Dofasco ..." (April 5, 2006); *Financial Times*, "ArcelorMittal Will Have to Sell US Plant" (November 14, 2006); and, *AMM*, "TK Sues Mittal Steel Over Foiled Dofasco Purchase" (December 27, 2006).

<sup>38</sup> "Ipsco To Be Acquired by SSAB for U.S. \$160 per Share for a Total Equity Value of U.S. \$7.7 Billion," joint Ipsco-SSAB press release (May 3, 2007).

<sup>39</sup> *AMM*, "Algoma Shareholders Approve Sale to Essar" (June 12, 2007), p. 6.

Finally, on August 26, 2007, U.S. Steel announced an agreement to acquire Stelco. Stelco was in 2005 Canada's largest steel producer and remained its last locally owned major steel company. It reorganized in 2006 after two years in bankruptcy protection.<sup>40</sup> Its 2006 production of 3.81 million MT, well below the company's earlier levels, ranked it 71<sup>st</sup> globally in **Table 1**. The company, based in the Canadian steelmaking center of Hamilton, Ontario, continued to struggle financially, losing more than \$C300 million in 2006, and was reported as negotiating sales of some major assets. U.S. Steel announced an acquisition price of \$1.1 billion (U.S.), plus assumption of Stelco's debts and pension liabilities.<sup>41</sup>

There is also just one company in **Table 1** from Mexico. Altos Hornos de Mexico S.A. (no. 79) is the last independently owned large Mexican steel mill. It has operated in bankruptcy for much of the last 10 years.<sup>42</sup> Argentina's Techint Group moved up to number 20 on the global list after acquiring other Latin American operations, including Hylsamex, a Mexican minimill operation. In June 2006 Techint's subsidiary Tenaris, reportedly the world's largest supplier of seamless pipe for the oil and gas industry, announced that it had reached a deal to acquire Maverick Tube Corp., based in Missouri and the largest maker of oil country tubular goods in North America.<sup>43</sup>

**Labor Relations Issues.** Another structural change in the industry was the merger of the United Steelworkers union with the Paper, Allied Industrial, Chemical and Energy Workers International Union (PACE). The executive boards of the two organizations agreed to the merger on January 11, 2005. The new union reportedly totaled 850,000 members, located in bargaining units in the United States, Canada and the Caribbean. While the merged union would have perhaps the longest formal name in labor relations history (the "United Steel, Paper and Forestry, Rubber, Manufacturing Energy, Allied Industrial and Service Workers International Union"), its abbreviated name is the United Steelworkers, and Leo Gerard, the USWA president, is the head of the merged union.<sup>44</sup>

Labor issues have affected the operations of two major U.S. producers in 2005-06, and represent fallout from the industry consolidation process. AK Steel locked out 2,400 workers represented by the Armco Employees Independent Federation (AEIF), a union not affiliated with the USWA, at its integrated Middletown, Ohio mill on March 1, 2006, after the deadline passed to negotiate a new labor contract.

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<sup>40</sup> On Stelco's emergence from bankruptcy, *ibid.*, "Mott Paying \$4.7 Million for 1M Shares in Stelco" (April 4, 2006).

<sup>41</sup> *Ibid.*, "Unexpected Challenges Hurt Stelco Results" (March 9, 2007); "Stelco, Cliffs Agree to Sell Wabush Stake" (June 7, 2007); "U.S. Steel Agrees to Buy Stelco ..." (August 28, 2007). U.S. Steel press release (August 26, 2007); and, *AMM*, "USS' Shopping Spree Is Not Over Yet" (October 2007 print ed.), p. 12.

<sup>42</sup> *Ibid.*, "Ahmsa Expected to Remain Major Player in Mexican Steel Industry" (January 25, 2007), p. 6.

<sup>43</sup> *AMM*, "Techint Inks Deal to Acquire All of Hylsamex for \$2.25B" (May 20, 2005); and "Tenaris Opens Door into US via \$3.2B Deal for Maverick" (June 14, 2006).

<sup>44</sup> *Ibid.*, "Executive Boards of USW, PACE Union Vote to Merge" (January 12, 2005).

The company stated that the expired contract was outdated by the new contracts negotiated at the other integrated mills, discussed above, operated the mill for a year with salaried and temporary workers. Labor-management issues were further complicated by an AEIF negotiating proposal for its members to be covered under a multitemployer health benefits plan operated by a third union, the International Association of Machinists (IAM). The USWA represents other AK operations and has tried to organize Middletown, but AEIF members in July 2006 voted to affiliate with the IAM instead.<sup>45</sup>

Agreement between the IAM and AK management was reached after further negotiations, and ratified by 85% of the workers represented. The company was able to freeze pension liabilities, and going forward made defined contributions to IAM's multi-employer pension plan. While increasing wages, the company in return received contract changes similar to the USWA deals at other steel companies and health care cost sharing. Besides the wage increase, employees gained job protection for returning workers who had been locked out, and improved language related to grievance procedures. But the new contract does not guarantee a base workforce (earlier more than 3,000). About 1,800 employees returned to operate the plant.<sup>46</sup>

Another company significantly affected by labor-management concerns was Gerdau Ameristeel. Although most minimills are non-union, the Brazilian-based company acquired three union-represented mills from North Star. It locked out union members at the mill in Beaumont, Texas, after the existing contract expired, and talks failed to establish a new one. But eventually the company terminated the lockout without agreement on a new collective bargaining arrangement. Meanwhile, labor contracts also expired at the former North Star mills in Minnesota and Iowa, though operations continued without a new replacement contract.<sup>47</sup> The company succeeded in December 2006 in achieving ratification by workers of a new contract at the wire rod mill in Perth Amboy, New Jersey, a union shop which it had acquired when it took over Co-Steel.<sup>48</sup> In early 2007, workers also ratified new contract agreements

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<sup>45</sup> The development of the dispute is described in detail in *ibid.*, "90 Days and Counting" (May 29, 2006 print ed.), pp. 4-5. On inter-union issues, see *ibid.*, "AEIF Blasts USW over Call to Strike Down Tie with IAM" (June 12, 2006); "Locked-Out Union Picks IAM, But Will AK, USW Let It Pass?" (June 16, 2006); "AK Won't Recognize IAM Representation" (June 21, 2006); "AK Workers Vote IAM In, But the Issues Remain the Same" (July 31, 2006); "Now It's the IAM's Turn To Try To Retool What's Broken at Middletown" (July 31, 2006 print ed., p. 9); and, "AK 'Puzzled' by IAM Comment about Latest Counterproposal" (December 27, 2006).

<sup>46</sup> *Ibid.*, "Union Ratifies New Contract to End Lock-Out by AK Steel" (March 16, 2007); and, "After a Marathon-Long 54 Weeks, the Sun Comes Out in Middletown" (March 19, 2007, print ed.).

<sup>47</sup> Other labor contracts inherited from acquisitions of Co-Steel and Sheffield Steel of Oklahoma are also expiring. The Gerdau Ameristeel labor situation is summarized in an *AMM* interview with CEO Mario Longhi, appointed in 2006, "'You Don't Go Through Transition Without Some Level of Challenge'" (May 15, 2006 print ed.), p. 13.

<sup>48</sup> *Ibid.*, "Union Members at Ameristeel Mill Approve Contract" (December 26, 2006).

between management and USWA representatives for the three former North Star plants.<sup>49</sup>

## World Steel Output Totals

World steel output in 2006 was 1.24 billion metric tons (MT), a new all-time record. Over the past 10 years, global steel output has increased by 65%, and since 2000, it has increased by nearly 50%. The main driver in this increase in production has been the **People's Republic of China**. It produced 419 million MT in 2006, more than four times the total it produced in 1996, when China first became the world output leader. During this ten-year period, China's share of global raw steel production increased from 13.5% to 34%.<sup>50</sup>

The **European Union** (EU) as a whole and **Japan** both produce more steel than the United States. The EU in 2006 produced 173 million MT, more than 16% of global steel production. The leading producer was Germany (44 million MT), followed by Italy (29 million MT), France (20 million MT) and Spain (18 million MT). Among the newer EU members from Central and Eastern Europe, Poland was the leading producer with 10 million MT.

**Japan** produced 116 million MT in 2006 and the **United States** produced 98.6 million MT. These two countries ranked number two and three globally, behind China. Japan's global share was 9% and the U.S. share was 8%. As **Canada** and **Mexico** each produced in the 15-16 million MT range, the **total North American output** of 130 million MT was 10.5% of the global total.

The former Soviet Union was once a leading producer, and ahead of the United States. In 2006, the production of **Russia** was 71 million MT (5.6% of world production), and **Ukraine** was 41 million MT (3.3%). Together with the smaller producers from the **Commonwealth of Independent States**, their share was about 10% of global steel production. Other major producers in a second tier include **South Korea, India, Brazil, Turkey, and Taiwan**, all in a 20-50 million MT annual range.<sup>51</sup>

## U.S. Import Patterns

The pattern of U.S. imports underwent a significant change in 2006, as total steel imports increased dramatically. During the period of the Bush safeguards, Canada and Mexico became the top two suppliers to the U.S. market. By 2005, the United States imported more than 9 million MT from its NAFTA partners, compared to about 5 million MT from all western Europe, traditionally the number-one source. A third western hemisphere producer, Brazil, became the third-largest national

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<sup>49</sup> *Ibid.*, "Workers Ratify New Pacts at Ameristeel Mills" (March 9, 2007).

<sup>50</sup> Data from International Iron and Steel Institute (IISI), as reported and analyzed by *Purchasing Magazine Online* (February 15, 2007). A later IISI report gives Chinese production for 2006 as 422.7m. MT.

<sup>51</sup> IISI. *World Steel in Figures*, "Major Steel Producing Countries, 2005 and 2006."



source, at 2.3 million MT in 2005. Imports from China grew to almost 2.2 million MT, Russia and Germany were about 1.4 million MT each, with Japan, Korea, and Turkey (about 1.2 million MT each) the other sources over a million tonnes.

There was a major rearrangement of rankings in 2006. The expanded European Union was the top source of steel imports, with 5.7 million MT (but with a total of 1.2 million MT, Germany was the only European supplier to top one million tonnes). Canada remained the leading national supplier, but its shipments to the U.S. market were flat compared to the previous year at about 5.4 million MT. Imports from Mexico were down by 11.5% and fell behind the total from China, which became the second-largest import source, as shipments more than doubled to 4.9 million MT. Imports from Russia grew even faster, to about the same total as Mexico. Brazil's exports to the United States in 2006 increased by 12% to 2.6 million MT, being restrained by a major mill outage. Turkey, Korea and Japan all saw substantial gains in the U.S. market, with shipments in 2006 rising to about two million MT or more each. Imports from Canada and, especially, China, both increased in the first half of 2007, but imports from most other sources declined.

## Steel Price Trends and Developments

### Steel Prices Remain at a High Plateau

Notwithstanding the removal of President Bush's steel safeguards, which had been heavily criticized by many steel-consuming industries and their representatives in Congress, the price of steel moved up, not down, after the President's action. Most economists would expect that, everything being equal, removal of the safeguard tariffs would encourage importation of steel into the domestic market, more competition with domestic steel producers, and, consequently, lower prices. But instead the price of steel in early 2004 rose sharply, and has stayed at a much higher level than it was before the initial presidential safeguard action of 2002.

A few months before the imposition of the Bush safeguards in March 2002, the price of hot-rolled carbon steel, a benchmark industrial product, fell as low as \$222 per ton. During the period that the safeguards were in effect, average steel prices were generally just above or below \$300 per ton. By September 2004, nine months after termination of the safeguards, the average spot price of this product was \$700-800 per ton.<sup>52</sup> Note that large industrial users, such as automotive producers, generally negotiate longer-term contract prices, which may be significantly lower.<sup>53</sup>

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<sup>52</sup> Data on steel prices before, during and after the Bush safeguards are taken from ITC. *Steel: Monitoring Developments in the Domestic Industry* (Investigation no. TA-204-9) and *Steel-Consuming Industries: Competitive Conditions with Respect to Steel Safeguard Measures* (Investigation no. 332-452), issued together as Publication no. 3632, Vol. 1, Table II-27; Global Insight. *Steel Monthly Report*, various issues; and, specifically on the September 2004 peak price, *AMM*, "Let's Take It Slow ..." (May 9, 2005).

<sup>53</sup> This system is described in Al Wrigley, "Car Talk: Wheeling and Dealing Steel in Detroit," *AMM*, December 23, 2002 print ed., p. 3. It is also summarized in Brian C. Becker (continued...)

Thus, the steel users most immediately and adversely affected by high steel prices were small and medium-sized companies that bought steel on the spot market.<sup>54</sup>

The data in **Table 2** indicate that while the price of all steel products has risen since 2001-02, there are considerable variations, depending in part on demand patterns in consuming industries. For example, some products widely used in the automotive industry peaked in 2004, fell back in 2005, and increased again in 2006, but fell again in 2007, in the face of major auto industry production cuts. This pattern is exhibited, for example, by hot-rolled and cold-rolled sheet steel, and by hot-rolled carbon “special bar quality” (SBQ) steel. Cold-rolled sheet, used for auto exteriors, was down by \$65 per ton in 2007, and SBQ bars, widely used for auto structural parts, was down by more than \$125. Prices for products used heavily in non-residential construction rose or fell by a much smaller amount. The price of concrete reinforcing bar increased in 2007 over 2006. Plate, normally less expensive than sheet steel, remained more expensive in late 2007, though down from its 2006 peak. Industrial quality rod, widely used in capital goods industries, stayed as high, or higher, in 2007 as in 2006.

There are also considerable variations in the overall rates of price increases. Cold-rolled stainless sheet steel (grade 304) increased almost four times in price, from the average low of \$1,295 per ton in 2003 to \$4,742 in late 2007. Steel plate, a product used in much greater volume, increased almost as rapidly, rising more than three times in value from its 2001 lows to 2007. On the other hand, oil country tubular goods have only risen by an average of only 40-60% from their lowest average values (in 2003) to the 2007 level. Prices have fallen in late 2007, after an ITC ruling revoked trade remedy duties that had been placed on imports (see below). Cold-rolled and hot-rolled sheet in 2007 were only about double the 2001 low prices, compared to the higher rate of increase for plate steel.

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<sup>53</sup> (...continued)

and Kevin Hassett, *The Steel Industry: An Automotive Supplier Perspective* (February 2005, funded by the Motor & Equipment Manufacturers Assn.), p. 13.

<sup>54</sup> See U.S. House. Committee on Small Business. *Spike in Metal Prices — What Does it Mean for Small Manufacturers?* Hearings, March 10 and 25, 2004.

**Table 2. Steel Price Series, 2001-2007**

Products	Average Annual Price Per Short Ton (\$)						
	2001	2002	2003	2004	2005	2006	2007 <sup>a</sup>
<i>Flat Products</i>							
<i>(Sheet)</i>							
Hot-Rolled Sheet	234	329	296	617	557	596	530
Cold-Rolled Sheet	319	422	383	693	647	695	630
Hot-Dipped Galvanized	328	440	402	734	675	762	760
<i>(Plate)</i>							
Cut-to-Length Plate	258	305	314	638	792	829	790
Coiled Plate	240	314	320	674	820	829	790
<i>Long Products</i>							
<i>(Bar)</i>							
Reinforcing Bar	310	306	318	447	486	526	580
HR Carbon Steel - SBQ 1000	340	353	372	546	719	838	710
Cold-Fin. Carbon Steel 1018	455	465	503	773	899	880	910
Merchant Angles (2"x2"x1/4")	288	252	306	482	520	582	677
<i>(Rod)</i>							
Low-Carbon Industrial Quality	310	317	323	568	583	592	590
High-Carbon Industrial Quality	330	330	333	599	605	618	670
<i>Tubular Products</i>							
OCTG <sup>b</sup> Carbon, Welded	880	811	788	1130	1345	1368	1270
OCTG Carbon, Seamless	1009	926	884	1228	1534	1567	1454
OCTG N80, Welded	1071	999	998	1341	1614	1735	1491
OCTG N80, Seamless	1163	1092	1072	1422	1764	1869	1549
<i>Stainless Steel</i>							
Cold-Rolled Sheet 304	1376	1301	1295	1734	2515	3287	4742

**Source:** Annual price data from *AMM* historical steel base price series, and 2007 data as reported in *AMM.com* (Oct. 26, 2007). Except for OCTG, prices converted from cwt. to per ton basis by CRS and rounded to nearest dollar. Selected categories based on those used in Global Insight, *Steel Monthly Report* price forecasts.

- a. Latest 2007 avg. data.
- b. Oil Country Tubular Goods.

While the price of steel has risen all over the world since 2000, price changes have moderated in recent years, with a tendency to converge across regions. Comparisons are based on “SteelBenchmarker,” a historical series provided by *American Metal Market* and the consulting firm World Steel Dynamics. Their data show that the relative U.S. price of hot-rolled steel, compared with other major markets, dramatically changed in 2002-2004. It went from lower than European and Chinese prices in 2002-03 to higher than European and world export prices, and double the Chinese price, for much of 2004. There was a sharp, brief fall in the U.S. price in late 2004, but then it recovered to run higher than other market prices for 2005 and the first half of 2006. With the weakening of the dollar exchange rate and stronger economic demand in Europe, the price of European hot-rolled steel rose by late 2007 to \$672 per metric ton (MT), while compared to a U.S. price of \$577. The latter figure was about the same as the reported world export price, helping to explain a decline of U.S. import tonnage in 2007 from the 2006 record level. As John Anton wrote for the economics consulting firm Global Insight, “In a real sense, the United States and the Eurozone have switched places as far as prices and imports are concerned.”<sup>55</sup> The Chinese price remained far below the U.S. price, but at \$470 per MT in mid-2007, the gap was only about one-third that seen in 2004-05.<sup>56</sup>

The continued high price of steel, as well as its volatility in some recent years, has led to suggestions that steel consumers might be able to hedge against price changes, futures contracts were traded in global commodity markets, as in the example of other metals. There is a counter argument that the chemistry and other specifications of steel supplied under contract are so precise, that it is impossible to consider it as a commodity item. Nevertheless, the board of the New York Metal Exchange (Nymex) in October 2007, reportedly approved launching futures contracts on hot-rolled steel, sold in units of 20 short tons, with prices settled on the basis of those reported in the “SteelBenchmarker.” Internationally, the Dubai commodities exchange is reported to be about to introduce a rebar futures contract, and the London Metal Exchange to introduce a steel billets contract for trade in the Asian and Mediterranean regions.<sup>57</sup>

## Steel Input Costs

From the perspective of the steel industry, a substantial and at least semi-permanent rise in the price of steel has been justified by the rapid rise in the price of many steelmaking inputs.

**Steel Scrap.** Initially, the rapid rise in steel prices in 2003 was especially linked to a rapid rise in scrap prices. This especially affected the minimill sector, because scrap is the major input in U.S. electric arc furnaces, the production technology they use. By 2002, total U.S. EAF production had overtaken the output of basic oxygen furnaces, the steelmaking technology of integrated mills that produce

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<sup>55</sup> Global Insight. *Steel Monthly Report* (September 2007), p. 6.

<sup>56</sup> See “SteelBenchmarker” chart in *AMM*, “Hot Band Rise in World Export Market Bucks Regional Trend” (October 25, 2007).

<sup>57</sup> *Ibid.*, “Nymex’s Board Gives Final Approval to Steel Contract” (October 24, 2007).

raw steel from iron ore, coke and other materials. While scrap is usually the principal input in minimill furnaces, it is also frequently added to iron in making steel at integrated mills (up to 25-30%). Scrap enables EAFs to produce a more competitively priced product, especially where absolute purity of the steel is not a prerequisite. Thus, all parts of the industry are affected by changes in the scrap price, though the minimills more than the BOFs. Since minimills are the low-cost producers of many steel mill products, a less competitive minimill price enables the integrated mills to raise their prices as well in a tight market.

The price of ferrous scrap tripled or even quadrupled in 2002-04, and has been highly volatile in the period since then. During some recent periods, the price of scrap has been higher than the price of finished steel in 2001-03.

In early 2002, the price of scrap was about \$65 per ton, the composite price for “number 1 heavy melt scrap,” a common commercial category, as reported by *American Metal Market*. The price reached a plateau of about \$100 from mid-2002 through mid-2003. Then the price rise accelerated to \$160 by the end of 2003, and climbed more steeply to an average of more than \$237 by early March 2004. More premium grades commanded higher prices, up to reports of more than \$300 per ton. At three different times during 2004 (March, August and November), the price of this benchmark category of scrap peaked near or above \$250. In 2005, at three different times during that year the price of scrap again peaked at more than \$220 per ton, but at one point it also fell to about \$120. In 2006, the price peaked once more above \$250, but was generally more stable. However, in March 2007, it skied to more than \$300 per ton, with better grades even higher, and it stayed above \$240 through October 2007.<sup>58</sup>

Many in the industry ascribed the rising price and reduced availability of domestic steel primarily to the rise in scrap prices, driven in turn by rising global demand, especially in China. For example, one witness at a House hearing linked the rise in scrap prices to a doubling of U.S. ferrous scrap exports, from 6 million tons in 2000 to 12 million tons in 2003. About half of the exports in the latter year went to just two Asian countries: China, and South Korea, whose steel exports increased because of demand in China.<sup>59</sup> Concerned that rising metal scrap exports were driving up domestic prices and aiding their foreign competitors, U.S. metals-consuming industries unsuccessfully petitioned to restrict non-ferrous metal exports. Steel users also considered such a request.<sup>60</sup> No petition was ever filed, however, for

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<sup>58</sup> See charts in *AMM*, February 7 and May 9, 2005 print eds., both on p. 15; January 9, 2006 print ed., p. 11; June 5, 2006 print ed., p. 14; August 28, 2006 print ed., p. 11 and, December 4, 2006 print ed., p. 11; May 14, 2007 print ed., p. 11; October 15, 2007, p. 9.

<sup>59</sup> House Small Business Comm. Hearing (March 10, 2004). Statement of Robert J. Stevens (Impact Forge Inc. and President, Emergency Steel Scrap Coalition).

<sup>60</sup> On export controls on both ferrous and non-ferrous scrap, see *AMM*, “Short Supplies, Export Angst” (February 23, 2004 print ed.), p. 2; “Scrap Wars Create Turmoil, Skepticism” (March 3, 2004); and, “Commerce Nixes Copper’s Plea to Cap Scrap Exports” (July 22, 2004), p. 1; also, *Washington Trade Daily*, “Limiting Copper Scrap Exports” (April 8-9, 2004).

short supply controls on steel scrap exports, nor was any legislation introduced to restrict such exports.

U.S. ferrous scrap exports have remained high. According to Commerce Department data, they were 11.7 million MT in 2004 and 12.4 million MT in 2005. China in those years took nearly 30% of the total, and was still the leading destination, but Korea fell behind Canada, Mexico, and Turkey.<sup>61</sup> In 2006, total ferrous scrap exports remained at the 12.4 million MT level, but exports to China fell by a quarter, and exports to Turkey were almost equal — 2.7 million MT to China, 2.5 million MT to Turkey. In the first half of 2007, Chinese imports of U.S.-origin ferrous scrap again declined compared to the same period in 2006, but overall scrap exports were up 36%. Turkey imported U.S. ferrous scrap at an annual rate of more than 3.5 million MT, and was the leading destination.<sup>62</sup>

Among other major exporters of scrap, Ukraine and Russia have restrictions on ferrous scrap exports, which serve to maintain a scrap supply for their domestic steel industries. The United States is a major net scrap exporter, and does not import large amounts from these countries, but their exports are important in terms of the overall global supply. For example, restrictions on scrap exports from the two countries may help explain the increased interest of the Turkish steel industry in importing scrap from the United States.

U.S. negotiators sought to eliminate scrap export restrictions as part of negotiations with the Ukrainian government to establish bilateral permanent normal trade relations (PNTR) and in negotiations related to U.S. acceptance of Ukraine's accession to the WTO. On March 6, 2006, U.S. and Ukrainian representatives signed a WTO accession agreement. On March 23, 2006, President Bush, following approval by Congress, signed into law a measure to establish PNTR with Ukraine (P.L. 109-205).<sup>63</sup> Ukraine had already passed legislation to cut its ferrous scrap export tax in half to about \$18/MT by the end of 2006. In the negotiations with the United States, Ukraine agreed to reduce the ferrous scrap export tax further to one-third of the previous level. Further reductions or elimination of the tax were made in negotiations with other WTO members.<sup>64</sup>

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<sup>61</sup> *AMM*, "U.S. Scrap Exports a Two-Sided Affair" (February 15, 2006), incl. table.

<sup>62</sup> 2006 data from unpublished *AMM* tables reporting revised Commerce Dept. data. Data for January-April 2007 from *AMM*, "US Exports of Ferrous Scrap by Destination" (June 13, 2007), table on p. 4.

<sup>63</sup> See CRS Report RS2114, *Permanent Normal Trade Relations (PNTR) Trade Status for Ukraine and U.S.-Ukrainian Economic Ties*, by William H. Cooper. This report notes that in 2005, "over half of U.S. imports from Ukraine consisted of steel plus coke that is used in making steel." A key U.S. policy change, sought by Ukraine and granted in February 2006 by the Commerce Dept., was change in Ukraine's designation from a "non-market" to a "market" economy. Domestic steel industry associations opposed this policy change, which they said will make it much more difficult to win antidumping cases against Ukrainian exporters; *AMM*, "Ukraine Still Playing Under Old Rules Despite New Trade Status" (March 27, 2006 print ed.), p. 2.

<sup>64</sup> *Ibid.*, "Ukraine OK of Export Duty Cut Stokes Fears of Scrap Shortages," (November 21, (continued...))

Russia also agreed to include export taxes and restrictions on scrap exports as part of its WTO accession negotiations. It accepted in the final bilateral agreement of November 2006 that it would reduce export duties on ferrous scrap to one-third of current levels over a five-year period following WTO accession.<sup>65</sup>

While the steel industry claims that it uses the world's most recycled material, reports are that the rate of recycling declined significantly in 2006. The officially reported rate by the Steel Recycling Institute (SRI) for 2006 was 68.7%, down from 75.7% in the previous year. SRI attributed the decline in recycling to the rising global demand for and production of steel. Its president stated that as demand increased, more readily available supplies of scrap in urban areas were being used up, and recyclers were having to dig into reserve supplies farther out into the countryside.<sup>66</sup>

**Rise in the Price of Iron Ore.** High iron ore costs have the greatest impact on the integrated steel industry, which must make steel from some form of iron ore. But it also impacts the minimills, which generally must use at least small amounts of pig iron or other iron units for purity. They have been seeking cheaper sources of iron units, also as an alternative to high-priced scrap.

In February 2005, when the major global steel making companies arranged their supply contracts for the coming year, Nippon Steel agreed to an unprecedented 71.5% price increase with the large Brazilian iron mining company, CVRD. This deal set the pattern for international iron ore purchases by other integrated steel companies, and compares with the previous high one-year price increase of less than 20% in 1980.<sup>67</sup> In 2006 CVRD negotiated a further 19% iron ore price increase with major European and Asian producers. After protracted negotiations with the major iron ore producers, Chinese steelmakers also accepted the same level of prices increase for 2006.<sup>68</sup> In late 2006 the Chinese steelmaker Shanghai Baosteel initiated

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<sup>64</sup> (...continued)

2005), p. 7; and interview of May 26, 2006, with Jean Kemp, Director of Steel Trade Policy, Office of U.S. Trade Representative. *Business Week*, in its issue of September 3, 2007, reported that, despite an ongoing political crisis, the Ukraine parliament in July 2007 "approved laws that lowered export taxes on metals [that] ... should help pave the way for Ukraine's entry" into the WTO by 2008 (p. 51).

<sup>65</sup> Office of the U.S. Trade Representative (USTR). *Trade Facts*, "Results of Bilateral Negotiations on Russia's Accession to the World Trade Organization (WTO): Non-Agricultural Goods Market Access" (November 19, 2006), p. 2.

<sup>66</sup> *AMM*, "Steel Recycling Rate Falls to 68.7% in '06: SRI" (August 24, 2007), p. 6.

<sup>67</sup> *AMM*, "CVRD Wins 71.5% Increase in Japanese Iron Ore Deal — Asian Steelmakers Gird for Domino Effect" (February 23, 2005), p. 1.

<sup>68</sup> CVRD did, however, agree to a 3% reduction in the price of iron ore pellets. *AMM*, "CVRD Deals Call for 19% Hike in Iron Ore Fines" (May 19, 2006), and "CVRD Seals Iron Ore Supply Deals with Arcelor, China Steel [Taiwan]" (May 25, 2006); *Wall St. Journal*, "China's Steelmakers Hold Out as Suppliers Set Pricing Deals" (May 19, 2006), p. B4; and, "Steel Prices Are Likely to Jump, Adding to Manufacturers' Woes" (May 24, 2006), p. A2; *Washington Post*, "China Agrees to Steep Increase for Iron Ore" (June 21,

(continued...)

price negotiations with CVRD on behalf of the Chinese steel industry for the next year's price level. The result was a further 9.5% price increase for iron ore, which set the standard for the world level, since China imports 40% of all internationally traded iron ore.<sup>69</sup>

Domestic U.S. iron ore production, which is in the form of taconite that is subsequently pelletized, increased in 2004-05. It is not directly affected by the global increase in iron price. After averaging less than 50 million MT in 2001-03, production was 54.7 million MT in 2004, 54.5 million MT in 2005, and 52.9 million MT in 2006. But these annual levels were still much less than the recent peak of more than 63 million MT in 2000. Most iron ore used by the U.S. steel industry is domestically produced. Exports and imports in 2005-06 were close to level, with imports slightly higher. Exports were 8.3 million MT in 2006, with 11.5 million MT imported. Canada and Brazil are by far the leading suppliers of imported ores and pellets.<sup>70</sup> U.S. steelmakers are not insulated from the high global price of iron ore, which doubled in price from \$26 per ton in 2002 to \$52 in 2006, according to the U.S. Geological Survey.<sup>71</sup> According to a press report, the typical price in mid-2007 was \$60 per ton.<sup>72</sup>

Minimills frequently use direct-reduced iron (DRI), a product that converts raw iron ore into units that may be substituted for scrap. However, this product requires large amounts of natural gas, and the rise in price of this input has led to the three DRI plants in the United States being dismantled to be reassembled and put into production in Trinidad and Saudi Arabia. A new coal-fired plant is being built in the Minnesota iron range, as noted earlier. This development indicates renewed interest in this historically important producing region.<sup>73</sup>

**The Cost and Supply of Coke.** Coking coal has been in relatively short supply, both domestically and internationally. According to the Department of Energy, U.S. domestic production of coke, derived from a grade known as metallurgical coal and used almost exclusively in blast furnaces by integrated steel mills, was 22 million tons in 1997. It was more than 20 million tons annually from 1998 through 2000, 18 million tons in 2001 and about 17 million tons in 2002-03.

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<sup>68</sup> (...continued)  
2006), p. D10.

<sup>69</sup> *Wall St. Journal*, "China Steelmakers Agree to Ore Deal; Likely Benchmark" (December 22, 2006), p. A2; *AMM*, "N. America Iron Ore Pellet Price Yet to Be Set" (December 26, 2006).

<sup>70</sup> Iron ore data from Dept. of the Interior. U.S. Geological Survey. *Mineral Commodity Summaries*, 2004 and 2006; and, January 2007 *Monthly Report*.

<sup>71</sup> *Ibid.*, p. 82.

<sup>72</sup> *Wall St. Journal*, "Ship Shortage Pushes Up Prices of Raw Materials" (October 22, 2007), p. A1.

<sup>73</sup> *AMM*, "The Sourcing Game," and "In Alternative Iron, Finding the Right Fit May Mean Moving the Plant" (May 15, 2006 print ed.), pp. 4-7. Transportation costs and problems, particularly a shortage of rail cars, have also contributed to raw material sourcing problems for the steel industry.



It remained below 17 million tons annually in 2004-06.<sup>74</sup> With China as the key source of coke on the world market, and China's own domestic demand growing, availability has been squeezed, and the price has risen. The consequence in recent years has been volatility in both the price and availability of coke.

These problems were exacerbated by a mine fire and an interruption in coke supplies from U.S. Steel, a major coke producer, to other steelmakers in 2003-04. This created a shock wave through the integrated steel industry. According to one industry source, the cost of coke rose from \$145/ton to \$250/ton between November 2003 and early 2004.<sup>75</sup> With the recovery in domestic steel demand, imports had to make up the gap. They more than doubled, from 2.8 million tons in 2003 to 6.9 million tons in 2004, then leveled off to 3.5-4.0 million tons annually after integrated steel production declined somewhat and domestic coke sources came back on line in 2005.<sup>76</sup> Full supplies have been subsequently resumed for U.S. Steel, but the company has declared itself out of the merchant coke market. Existing coke plants are being reopened or modernized, and some new ones are being developed, although in the latter case coke plants sometimes engender opposition on environmental grounds.<sup>77</sup>

China is the world's leading supplier of coke in international trade, and the United States has been the number-two importer, behind the European Union (EU).<sup>78</sup> As more Chinese coke output is being used in domestic steel production, export growth flattened.<sup>79</sup> A witness before the House Small Business Committee noted that the Chinese coke export price had risen from \$55 per ton to between \$200-300 per

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<sup>74</sup> U.S. Dept. of Energy. Energy Information Administration (EIA). "Coke Overview, 1949-2003" (February 11, 2005); and, "Quarterly Coal Report" (January-March 2007), table 2.

<sup>75</sup> Scott Robertson, "For Some Steelmakers, a Lump of Coal Would be a Welcome Gift," *AMM* print ed. (March 15, 2004), p. 3. The information on the price rise is from industry consultant Charles Bradford, in Tom Balcerek, "Back Behind the Wheel," *AMM* print ed. (February 9, 2004), p. 6. The thrust of the article, however, is that higher scrap prices have made the integrated industry overall more competitive against minimills.

<sup>76</sup> EIA. "Quarterly Coal Rept." (January-March 2007), table 2.

<sup>77</sup> Weirton Steel, once a purchaser of coke from U.S. Steel, has ceased to produce raw steel since its acquisition by Mittal. Another former U.S. Steel customer, Wheeling-Pittsburgh has been rebuilding and modernizing its coke plant in Follansbee, WV, but the process has been more difficult and costly than originally planned. *AMM.com*: "More Demand Attracts More Supply?" (July 23, 2004); "Wheeling-Pitt Mulling Post-BF Coke Strategy" (August 9, 2004), "Some Coke Batteries at 50% as Woes Continue" (January 21, 2005); *AMM*, "Construction of Ohio Coke Plant May Start Soon" (January 2, 2006), p. 1, and, "Things Aren't Quite Going to Plan with W-P's Oven Rehab" (May 15, 2006 print ed.), p. 8. Plans for other coke plants are affected by environmental issues; *ibid.*, "Sun Drops Coke Plant Plan; Others Still in Works for Now" (November 9, 2006); and, "Proposed Ohio Coke Plant Hits Another Snag" (June 8, 2007), p. 6.

<sup>78</sup> *AMM.com*, "Mills Face Coke Quandary as Chinese Prices Soar" (May 16, 2003).

<sup>79</sup> A Chinese official stated that, "China would limit coal exports in 2004 to meet the increasing domestic demand;" "China Coal Policy," *China Business News On-Line* (January 29, 2004); also, "China Coke Exports Seen Even Lower," *Platts International Coal Report* (December 8, 2003).

ton by early 2004, and that in February 2004, China was actually a net importer of coking coal versus typical net exports of 1 million tons per month.<sup>80</sup>

As a consequence, China sought to tighten its allocation system, and to substantially reduce exports by reducing export quotas and raising the price of export licenses. The EU brought a World Trade Organization case against China, which then agreed that the amount of coal exported to the EU would not decline in 2004.<sup>81</sup> China also maintained this level of exports in 2005, but the EU has argued that such temporary amelioration does not resolve the complaint. “They are under an obligation to remove restrictions on the export of coke for steelmaking,” according to EU external trade commissioner Peter Mandelson.<sup>82</sup> Chinese coke prices dropped from a short-lived peak of more than \$400 per MT in 2004, to less than \$150 in late 2005.

In contrast to the situation in 2003-04, “massive investment” in Chinese coke resources had created a surplus of supply over demand. U.S. prices fell below \$140 by the end of 2005.<sup>83</sup> In early 2007, average receipts at U.S. coke plants were reported to be less than \$100 per ton by the Energy Department.<sup>84</sup>

But trends reversed again later in the year. In August 2007, Warren Consolidated Industries of Ohio, the smallest U.S. integrated steel operation and one wholly dependent on the merchant coke market, predicted that a sharp rise in coke prices of “\$55-70 per ton” in the second half of 2007 would have seriously adverse operational cost consequences for a company already losing money.<sup>85</sup> Industry analysts reported September 2007 coke prices in China of \$325 per ton, which would translate to \$450, when delivered to the U.S. market, owing to high costs of shipping (see below). By contrast, the cost of making coke domestically was \$250 per ton, which, according to an analyst, is “... why all these companies are scrambling to become self-sufficient.” U.S. merchant coke producers were also scrambling to get on the bandwagon. For example, the International Coal Group, a company controlled by Wilbur Ross, that produced only 100,000 tons of metallurgical coal in 2006, planned to increase output to 2.4 million tons by 2009.<sup>86</sup>

**The Price of Natural Gas.** Natural gas is widely used in the steel industry, by both integrated mills and minimills. Steel must be heated and cooled frequently

<sup>80</sup> House Small Business Committee hearing (March 10, 2004), statement of W. Atwell, p. 2.

<sup>81</sup> *Europe Energy 2004*, “EU and China End Their Coke Trade Battle” (June 4, 2004); interview with Jean Kemp, Director for Steel, Office of U.S. Trade Representative (January 27, 2005).

<sup>82</sup> *AMM*, “EU Presses China to Change Coke Export Rules” (November 9, 2005), p. 4.

<sup>83</sup> *AMM*, “A Cool Down in Coke Prices” (November 7, 2005), pp. 4-5.

<sup>84</sup> EIA. “Quarterly Coal Report” (January-March 2007), table 23.

<sup>85</sup> *AMM*, “WCI Facing Difficult 2d Half But Planning a Turnaround” (August 10, 2007).

<sup>86</sup> *Ibid.*, “Coke Prices Said Set to Jump Near ‘04 Record Pace;” and, “Higher Prices, Strong Demand Spur Met Coal Production Hike” (October 11, 2007), p. 8.

in the course of melting or remelting materials, as well as shaping and tempering steel mill products. Among all steelmaking inputs, perhaps none has risen higher in price recent years than gas. As of November, 2005, the benchmark Henry Hub cash price of natural gas, at \$13.83 per million BTUs, was more than double the level of one year earlier. On comparative indices of input costs, natural gas in late 2005 was nearly five times its long-term benchmark level and more than double the level of one year earlier. Scrap was about double its benchmark, while coal was still within about 15% of its benchmark.<sup>87</sup>

Gas prices have ameliorated since then. The late 2005 spike was partly caused by Gulf “shut in” production, resulting from hurricanes Ivan (2004), Katrina, and Rita (both 2005). With a mild winter, prices dropped more than \$2/mmBTU in January-February, and settled at just over \$7/mmBTU in March-May 2006.<sup>88</sup> Despite concern regarding winter demand in 2006-07, the average spot price did not again reach a level close to \$10 during that period. Prices are holding steady for 2007, although the consulting firm Global Insight predicted that at \$8-9 per million BTUs, 2007-08 winter gas prices would be somewhat higher than year-earlier levels.<sup>89</sup>

**Shipping Costs.** Both rail and ocean shipping costs have increased substantially in recent years, though these rising costs have affected the steel industry in different ways. Rail transportation costs, seen as railways have consolidated and created more “captive shippers,” have had a negative effect on industry, particularly in raising the costs and reducing the options for shipping inputs like scrap and delivering finished product to customers. According to the Government Accountability Office (GAO), while rail rates have declined over the long term, they increased by 9% in 2005, basically for all products across the board.<sup>90</sup> The steel industry specifically reported increases of around a third in rail costs since 2003, and in some cases as high as 60%. “Transportation costs have escalated to the point that they now account for 15-20% of the total cost of producing steel.”<sup>91</sup>

On the other hand, the high increase in ocean shipping rates has not been unfavorable from the perspective of U.S. steelmakers. According to the *Wall Street Journal*, the average price of renting a ship in October 2007 to carry raw materials

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<sup>87</sup> Gas price statistics from Global Insight, *Steel Monthly Report* (November 2005), tab. 1; and, *Natural Gas Weekly* (January 11, 2006).

<sup>88</sup> Global Insight. *Steel Monthly Report* (March 2006), p. 8; and *Natural Gas Monthly* (May 2006), pp. 1-2 and table 5.

<sup>89</sup> *Ibid.* (September 2007), p. 2.

<sup>90</sup> U.S. Government Accounting Office. *Freight Railroads: Updated Information on Rates and Other Industry Trends* (GAO-08-218T), Testimony before U.S. Senate. Committee on Commerce, Science and Transportation. Subcommittee on Surface Transportation and Merchant Marine (October 23, 2007), p. 1.

<sup>91</sup> Thomas A. Danjczek, Steel Manufacturers Assn. Statement, U.S. House. Transportation and Infrastructure Committee (September 20, 2007), p. 2. For more details on the rail competition issue, see CRS Rept. CRS Report RL34117, *Rail Access and Competition Issues*, by John Frittelli.

from Brazil to China has tripled to \$180,000 per day over the cost one year earlier. That means the cost per ton of shipping iron ore works out at about \$88 per ton, or higher than the \$60 per ton price of the ore itself.<sup>92</sup> The Global Insight analyst finds that this means higher prices for steel imports, as well as a discouragement to the export of ferrous scrap to competing steel producing nations. With relative prices in the United States falling compared to those of other global producers, “When lead-time risks and the explosion in sea-borne freight rates are incorporated, the advantage in [steel] imports is minimized or even negated.” This source notes that investment in ocean shipping, iron ore mines and coke ovens globally should eventually reduce such domestic price advantages, but all this will take time to come on stream.<sup>93</sup>

## The Impact of the Growth of China

While U.S. domestic demand and input cost factors have helped account for an overall increase in the price of steel in the domestic market, China’s emergence as a major, market-oriented economic power is having more of an impact on steel markets and prices than anything else today. Chinese steel mainly goes to its domestic market. What has concerned the U.S. steel industry is that, as China adds new and modernized steel capacity, it will be used increasingly to export surplus steel as domestic demand is adequately met. Moreover, the steel industry and its customers have alleged that Chinese steel and steel product exports are unfairly subsidized. On February 2, 2007, the Office of the U.S. Trade Representative (USTR) filed a complaint at the WTO against China regarding this general issue.

The Chinese government has responded by some reductions of measures that encourage steel exports. More broadly it has also taken limited steps to allow its currency to rise against the dollar on foreign exchange markets, which makes Chinese products less competitive against U.S.-produced goods. But the steps taken to date have not been sufficient to satisfy the domestic U.S. steel industry, the Bush Administration, nor critics of China in Congress.

**China as a Steel Producer, Consumer, and Exporter.** China has become the world’s largest steel producer, as discussed in the earlier section on world output. At the same time, in the years after 2000, it briefly became the largest importer. It absorbed increasing amounts of the world supply of scrap and other inputs, while its demand drove the global price of steel higher, notably in 2004. China’s rapidly growing appetite for steel also drew in high levels of imports from other major Asian producers such as Japan, Korea and Taiwan, probably diverting them from the U.S. market. The consequences were higher prices for steelmaking inputs in the United States and lower availability of imported finished steel at competitive prices. Meanwhile, U.S. steel consuming industries increasingly must compete with fabricated steel products from Chinese suppliers.

The Chinese government in 2004 sought to restrain growth by curtailing consumer credit, thus reducing the growth in demand for products made of steel, such

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<sup>92</sup> *Wall St. Journal*, “Ship Shortage ...”

<sup>93</sup> Global Insight. *Steel Monthly Report* (September 2007), p. 2.

as motor vehicles. It has also sought to brake the development of capacity, or at least to insure that new, modern facilities replace outdated mills. But, as Global Insight analyst John Anton noted, if this were the Chinese central government's policy, it did not work.

Chinese steel production has grown at incredible rates, rising 14% in 2001 and nearly 25% annually since. In context, China and the United States produced roughly the same tonnage in 2000, but China is likely to produce almost three times the U.S. output in 2005.<sup>94</sup>

China once more became a net steel exporter in 2005: 27.6 million MT of exports, against 27.1 million MT of imports, according to official sources.<sup>95</sup> China also fell behind the United States in total steel imports. In March 2006 a top official of the China Iron and Steel Association (CISA), an industry body, reassured an international audience that Chinese steel exports would be about 20 million MT in 2006. This was described by him as a "reasonable" level, given total capacity of more than 400 million MT, and he also stated that capacity would be nearly matched with domestic demand.<sup>96</sup> Some private sector sources said that while China still has significant labor cost advantages, these are counterbalanced by raw material and energy costs, as both are in short supply in China.<sup>97</sup>

Despite such assurances and statements, China's total steel exports in 2006 reportedly more than doubled to 57.4 million MT, while imports fell by a quarter.<sup>98</sup> According to the U.S. industry, China was a net steel exporter of 33 million MT in 2006.<sup>99</sup> Moreover, in the first half of 2007, official Chinese data indicated that exports of finished steel from China virtually doubled over the rate for the same period in 2006. Some of this increase, however, may be attributable to Chinese producers seeking to beat government measures to discourage steel exports, which are described below.<sup>100</sup>

The International Iron and Steel Institute, representing steel producers globally, has estimated that the rate of growth of Chinese demand for steel will slow in forthcoming years. Nevertheless, it may still account for more than half of the anticipated world growth in steel consumption between 2005 and 2015.<sup>101</sup> But an

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<sup>94</sup> Global Insight, *Steel Monthly Report* (November 2005), p. 1. According to IISI figures cited earlier, China in 2005 actually produced *four* times as much steel as the U.S.

<sup>95</sup> Reported in *AMM*, "December Increase Makes China Slight Net Exporter of Steel in '05" (January 13, 2006), p. 7.

<sup>96</sup> *Ibid.*, "China's Steel Exports Will Not Explode in '06: CISA Official" (March 29, 2006).

<sup>97</sup> *Ibid.*, "Is the China Threat Overstated?" (May 8, 2006 print ed.), p. 14.

<sup>98</sup> *Ibid.*, "China's Finished Steel Exports Up" (January 11, 2007), p. 6.

<sup>99</sup> AISI, SMA, and Specialty Steel Institute of North America. "American Steel Industry Comments on Chinese Steel Paper," press release (June 1, 2007).

<sup>100</sup> *AMM*, "Finished Steel Exports Soar 98% in First Half" (July 11, 2007), p. 13.

<sup>101</sup> Hans Mueller, "IISI Sees Global Expansion Until 2015," *Metal Producing and* (continued...)

analysis produced in May 2007 by a Chinese metals industry organization emphasized that China has no intention of creating an export-oriented steel industry. It acknowledged a temporary situation of domestic overcapacity, as government measures took effect to close old capacity, and to rationalize and modernize the industry. It further noted measures (summarized in this CRS report below) that the government was taking to curtail disruptive exports. But the report also noted that the growth in Chinese demand for and production of steel has coincided with a resurgence of the industry worldwide, so it argued that the net effect has not been to harm other countries' producers.<sup>102</sup>

**Figure 3**, based on data presented by industry analyst Charles Bradford to the Steel Manufacturers Association in May 2007, shows that the Chinese steel industry, along with that of the United States, is actually one of the two major national producers least dependent on exports. In the case of China, 2006 exports were only 11% of output, in Bradford's calculations, while the U.S. figure was just less than 10%. Three leading Asian producers outside China (Japan, Korea and Taiwan) exported a third or more of production. Canada, Brazil and Russia exported half or more of their output, Germany two-thirds, and Ukraine nearly 90%. But the problem is that with China accounting for such a huge share of global output, marginal shifts by its industry in the direction of increased exports lead to major market disruptions for other suppliers.<sup>103</sup>

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<sup>101</sup> (...continued)

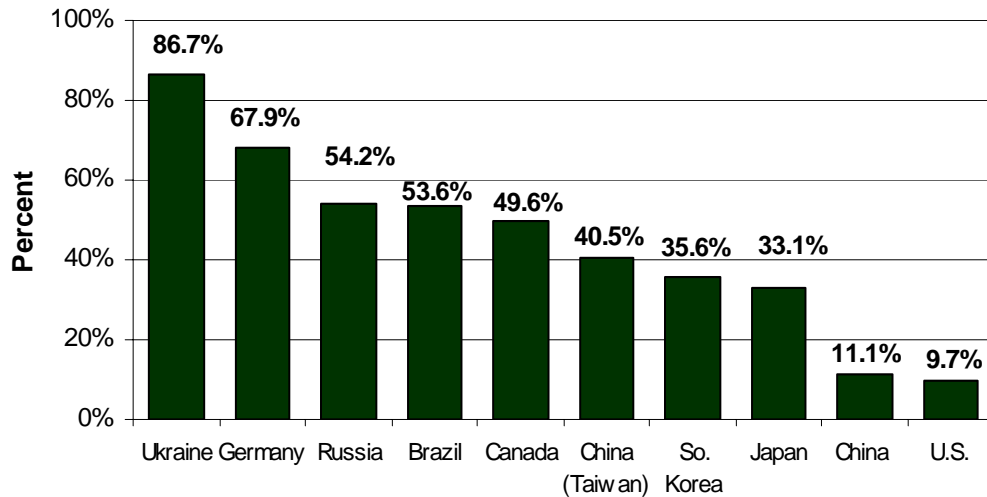
*Processing* (November-December 2006), pp. 15-16.

<sup>102</sup> China Chamber of Commerce of Metals, Minerals and Chemicals Importers & Exporters (CCCME). *China's Steel Industry: Dealing with Growth, Consolidation and Rationalization* (May 2007).

<sup>103</sup> Leading representatives of the U.S. steel industry are skeptical as to whether a Chinese promise to limit exports to 10% of production can resolve this issue, or will ever be implemented; *AMM*, "US Industry Doubtful of China Pledge on Steel Export Limits" (June 25, 2007), p. 4.

**Figure 3. Steel Exports by Country**

As a Percent of Total Output 2006



**Source:** Bradford Research Inc. and International Iron and Steel Institute.

The concern of U.S. producers is that whenever domestic Chinese demand falls short of expectations, the U.S. market will see a sharp increase in steel imports from China. For example, by 2000, China was exporting more than one million MT of steel annually to the United States. These exports fell off to 582,000 MT in 2003, as U.S. demand declined and trade safeguards were implemented. But Chinese imports in the United States almost tripled to more than 1.4 million MT in 2004, increased again by a third to 1.9 million MT in 2005, and more than doubled again in 2006, as discussed above. Data for 2006 seem to indicate that, while steel demand in China is continuing to increase, it is not keeping pace with the building of new, modern steelmaking capacity, and Chinese exports are likely to grow.<sup>104</sup> While the Chinese central government may be committed to eliminating old capacity, consolidated, internationally competitive Chinese producers may be even more of a problem for the U.S. industry in an open market environment.

**China's Proposed Steel Industry Restructuring.** In July 2005, the Chinese government released the China Iron and Steel Industry Development Policy, prepared by the National Development and Reform Commission (NDRC). According to official sources, this policy is to consolidate and modernize the industry, with a specific goal of "strategic reorganization" to create by 2010 two 30-million-ton annual capacity producers and several "internationally competitive" companies at the 10-million-ton level. In a joint statement to the WTO Transitional Review Mechanism on China's accession, the United States, Canada and Mexico in October 2005, "agreed with the goal of an efficient, rationalized steel industry" in China, but seriously questioned the methods envisioned in the proposed new policy.

<sup>104</sup> *Ibid.* "China Is Awash in Steel and Racing to Exploit a Price Advantage" (June 19, 2006 print ed.), pp. 6-7.

- First, they questioned how a state policy with an explicit goal to shape a specific market outcome would work without “government making decisions that should be made by the marketplace.” Specifically they questioned the role that state-owned banks would have in restructuring the steel industry, the roles of administrative agencies, and how conflicts between central, provincial and local governments would be resolved.
- Second, they noted that two articles on the state’s role in implementing policy were questionable under WTO anti-subsidy rules. Article 16 of the Chinese policy provided for various types of state support in developing and modernizing the industry. Article 18 “encouraged” the Chinese steel industry to use domestically produced equipment, and to import equipment only if domestically made equipment were insufficiently advanced, unavailable or in short supply.<sup>105</sup>

The U.S. government included these concerns in direct bilateral discussions with China on steel policy. In December 2005, the Bush Administration declined to provide safeguard relief for the domestic steel pipe industry against Chinese imports (see below). But at that time it did propose to the Chinese a dialogue on steel policy, within the context of the U.S.-China Joint Commission on Commerce and Trade. In 2006, the U.S. side noted “serious concerns” with the proposed Chinese Steel Policy, including preferences for domestically produced equipment and technologies, import and export controls, controls on foreign investment, and “de facto” technology transfer requirements. “More generally,” U.S. representatives expressed concern with the entire approach of the policy, in substituting government decision making for market forces, in direct contrast to Chinese commitments at the time when they joined the WTO.<sup>106</sup>

The American steel industry similarly expressed concern with government interference in the Chinese steel industry. A July 2006 report sponsored by all the major U.S. steel producer organizations claimed that Chinese steelmakers are unfairly aided by a wide range of government measures. Entitled *The China Syndrome*, the report stated that the Chinese approach includes high levels of continued government ownership (80% of Shanghai Baosteel, for example), subsidization through loans from state-owned banks at less than commercial rates, debt writeoffs, assistance with raw material input costs, and maintenance of an artificially low currency exchange rate. Some of this effective subsidization results

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<sup>105</sup> World Trade Organization. Committee on Subsidies and Countervailing Measures. “Transitional Review Mechanism Pursuant to Section 18 of the Protocol on the accession of the People’s Republic of China: Questions from Canada, Mexico and the United States Concerning Subsidies” (G/SCM/Q2/CHN/15, October 13, 2005).

<sup>106</sup> Assistant USTR for China Affairs Timothy Stratford. “Statement at Congressional Steel Caucus Hearing” (June 14, 2006), esp. p. 3. A report on this hearing, which includes congressional rejoinders to the USTR policy statement is in *AMM*, “China Fuels Fire of Caucus Trade Grilling” (June 19, 2006 print ed.), p. 2.



from active national government policy, it was alleged, and some results from the central government's failure to control provincial and local government entities.<sup>107</sup>

In 2007, a more detailed report sponsored by the U.S. steel industry provided a partial tabulation of the documented subsidies it said were received by the Chinese steel industry. Limited to publicly reported data by the 20 largest Chinese steel producers, the report, entitled *Money for Metal*, calculated that subsidies received by the Chinese industry totaled U.S.\$52 billion (393 billion renminbi, in Chinese currency). It summarized its analysis of the principal subsidies as follows:

- \$17.3 billion in preferential loans and directed credit from government-controlled banks, accounting for the “majority of all loans in China.”
- \$18.6 billion in “equity infusions and/or debt-to-equity swaps ... At least 37 different Chinese steel companies have benefitted, including all of the major producers.”
- \$5.1 billion in land-use discounts, necessitated because private land ownership by industrial enterprises is “nearly impossible in China.” The report alleges that steel companies are charged only a pittance for the land-use rights they acquire.
- \$1.3 billion in “government-mandated mergers.” As part of the policy of industry consolidation, favored companies, such as Shanghai Baosteel, have been transferred controlling equity stakes in smaller competitors at little or no cost.
- \$258.6 million in direct cash grants, sometimes linked to specific construction contracts, reported by steel companies.<sup>108</sup>

The system of subsidization, the report alleges, is linked to government control of the industry, which it details in a tabular presentation on the 20 largest steel companies. Of these companies, all except one (number 17 by output) are wholly or majority-owned by governments. However, in calculating government ownership, the table essentially lumps together central, provincial, and local levels of ownership.<sup>109</sup> The conflict between the policy goals of these levels of government is explicitly stated in the report:

All three levels of government maintain separate, and sometimes distinct, policies that impact the steel industry. While these policies are often in concert with one another ... the numerous policy directives from the various levels of government underscore the often competing interests between the central, provincial and local governments ... Notably, ... many provincial and local

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<sup>107</sup> Alan H. Price, *et al.*, *The China Syndrome: How Subsidies and Government Intervention Created the World's Largest Steel Industry* (July 2006). For a summary, see AMM, “Steel Groups say China in Violation of WTO Rules” (July 14, 2006).

<sup>108</sup> This summary is abridged from the executive summary in the same authors' *Money for Metal: A Detailed Examination of Chinese Government Subsidies to Its Steel Industry* (July 2007), pp. ii-iii. The detailed analysis of these subsidies is in pp. 25-42, with other types of subsidies discussed in pp. 52ff.

<sup>109</sup> *Ibid.*, Table 1, pp. 8-9.

governments are encouraging the expansion of the local steel industry at the same time that the central government purports to be eliminating obsolete capacity and limiting overall capacity.<sup>110</sup>

The central Chinese government itself recognizes a problem, which it ascribes to obsolete excessive productive capacity. It indicated plans to shut 100 million MT of excess capacity, particularly among more than 200 smaller mills in two northern interior provinces.<sup>111</sup> In 2007, after many months of delay, the NDRC drew up an expanded list of 682 steel facilities, located at 334 sites, which were to be closed by 2010 at the latest. Although the operations affected number in the hundreds, the total steelmaking capacity would be about 35-40 million MT, or less than 5% of China's capacity, according to independent analysis. NDRC is quoted as saying that there will be further announcements of closures. "However," the analysis notes, "the government cannot stop mills developing larger, more efficient facilities that comply with NDRC guidelines while increasing capacity."<sup>112</sup>

*Money for Metal* does not maintain that there is a monolithic Chinese steel policy controlled by a single government entity, but rather that industry ownership and control is in the hands of different government entities with different agendas. The Chinese industry it describes is not really controlled by "government" as much as it is controlled by "governments," in a Communist state that is in a process of transitioning itself to a more market-oriented economy. The report seems to project a future in which the U.S. steel industry may confront either a more consolidated and efficient Chinese industry, able to export whenever it has excess capacity for domestic demand, or a rampantly expanding industry, which can always cut price to export excess output — or both existing simultaneously, and subsidized by all levels of government in China.<sup>113</sup>

CISA has rejected this analysis of a highly subsidized domestic industry. It reportedly stated, in a response to the report, that dominance of the industry by a group of leading, government-controlled companies was a false image, and the calculation of \$52 billion in subsidies "in the past decade lacks proofs and is full of false accusations." It maintained that the domestic industry is both more broadly based and privately held than the U.S. industry report would indicate. In any case, CISA noted, "It is a common practice for each country, including the U.S., to subsidize its steel industry as it develops."<sup>114</sup>

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<sup>110</sup> *Ibid.*, pp. 12-13, 19; the intervening pages cite many examples of conflicts between central government five-year plans, and the implementation in local plans.

<sup>111</sup> *AMM*, "China Reiterates Plan to Cut Excess Iron, Steel Capacity" (July 5, 2006).

<sup>112</sup> Steel Business Briefing. *SBB Analytics: China*, "The NDRC on the War Path" (May 7, 2007), quote from p. 3.

<sup>113</sup> Similar points were made by the domestic steel industry in an October 2007 ITC hearing on China's steel industry that was requested by Congress. See *AMM*, "Steelmakers Mount Attacks Against China on Two Fronts" (October 31, 2007).

<sup>114</sup> *Ibid.*, "CISA Lambastes US' China Steel Subsidy Report" (August 8, 2007).

The CISA position reflected the official reaction of the Chinese government to the U.S. industry report, as expressed in the session of the U.S.-China Steel Dialogue, held in early August 2007. The Chinese delegation reportedly attacked the paper as “propaganda” and replete with “misconceptions.” They claimed that the U.S. industry abused U.S. trade remedy laws and was itself the beneficiary of subsidies. One allegation was that PBGC’s takeover of steel industry pensions (see above) represented a U.S. government bailout of the steel industry. This itself is a common misconception; though chartered by Congress as a government corporation, PBGC receives no federal appropriations and is funded by premiums paid by covered private industry pension plans.<sup>115</sup> The meeting apparently ended with no substantive agreement on policy issues.<sup>116</sup>

**The U.S. WTO Case Against Chinese Subsidies.** The Bush Administration found responses by China regarding U.S. complaints about state subsidies to be insufficient. On February 2, 2007, the Office of the USTR announced that it was seeking consultations with China at the WTO on a range of policies that effectively subsidized Chinese producers, explicitly including the steel industry. Consultation is the first step in bringing a case under WTO rules against a trading partner. The USTR statement noted that, “Several of the subsidy programs at issue appear to grant export subsidies, which provide incentives for foreign investors in China and their Chinese partners to export to the United States and other markets.” The statement did note progress in China “to open its market and reform its trade practices since becoming a Member of the WTO,” and that China made “express commitments in its accession protocol to abide by WTO prohibitions on the granting of export and import substitution subsidies. However, the Chinese government has continued to use a number of industrial policy tools — including these kinds of subsidies — to support Chinese industry.”<sup>117</sup>

In specific response to the Administration action, China eliminated one type of alleged subsidy and announced a new tax program to address other subsidy issues. This necessitated a re-filing of the U.S. case at the WTO in May 2007. The United States was joined by Mexico as an original complainant, with Canada, the EU, Japan, and Australia as third parties to the case.<sup>118</sup>

Furthermore, other nations have also taken, or are reported to be considering, trade remedy measures aimed at restraining steel imports from China. The Canadian International Trade Tribunal ruled that a type of OCTG product imported from China injured a Canadian producer, setting the stage for AD/CVD tariffs to be set by the

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<sup>115</sup> See CRS Report RS22650, “The Pension Benefit Guaranty Corporation and the Federal Budget,” by William J. Klunk.

<sup>116</sup> *AMM*, “Chinese Fight Back at US-China Steel Dialogue” (August 6, 2007).

<sup>117</sup> Office of USTR. “United States Files WTO Case Against China over Prohibited Subsidies,” press release (February 2, 2007); *FT.com*, “US-China Tensions Rise over Subsidies” (February 2, 2007); *Washington Post*, “U.S. Takes China to WTO over Subsidies” (February 3, 2007), p. D3; *AMM*, “US Files Case Against China on Subsidies” (February 5, 2007).

<sup>118</sup> CRS interview with Jean Kemp, Office of USTR (June 22, 2007).

Canadian Border Services Agency.<sup>119</sup> European and Mexican steel producers have initiated or are reportedly planning requests to their authorities for broad trade restriction measures on Chinese steel imports.<sup>120</sup>

**Chinese Measures to Restrain Steel Exports.** The Chinese government has also taken specific actions to curtail or eliminate policy measures, which, although they may be legal under U.S. trade law or WTO rules, have the effect of encouraging steel exports as opposed to domestic sales. These measures included reduction or elimination of China's general value-added tax (VAT) rebate of as much as 17% on exported steel products and adding an export duty on some steel items. As expressed in the May 2007 Chinese industry paper, "The reduction and elimination of the VAT tax rebate is designed as a 'bridge' measure to rein in exports while other elements of China's steel policy take effect and bring supply and demand into balance domestically."<sup>121</sup> Moreover, in May 2007 China announced establishment of a steel export licensing system that would apply to "a significant portion of China's steel exports."<sup>122</sup>

The U.S. government has stated its preference for market-based policy reforms, including the elimination of systemic subsidies, rather than administrative actions on foreign trade, as a solution to the question of unfair competition from China. But the breadth of the U.S. WTO case on Chinese subsidies throughout its economy indicates how deep-rooted such policies are, and how difficult they may be to eliminate. Consequently, short-term measures may be necessary to address the problem of "overheated" steel exports. But in implementing this approach piecemeal and with border measures aimed at specific products, the Chinese government may also give the impression that it is manipulating or gaming the trading system product by product.<sup>123</sup> Moreover, the discouragement of steel exports may well just push the problem downstream, as U.S. steel consuming industries find increased competition from Chinese producers using cheap domestic steel.<sup>124</sup>

Such interpretations could be drawn from a quick review of how the Chinese policy has moved forward since an initial policy circular of September 2006. First, the government marginally reduced (from 11% to 8%) the export rebate on a range of steel products (plate, coiled sheet, bars). But it also cancelled rebates of 5% on some steelmaking alloys at that time, then later established export duties on a wider

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<sup>119</sup> *AMM*, "China Seamless Casing Imports Said Injuring Canadian Producer" (October 17, 2007), p. 6.

<sup>120</sup> *Ibid.*, "Wire Rod Case in Works by Mexican Producers" (October 31, 2007); *Wall St. Journal*, "European Steel Makers to Seek EU Tariffs on China Steel Imports" (October 29, 2007) p. A2 .

<sup>121</sup> CCCMC, *China's Steel Industry*, p. 16.

<sup>122</sup> *AMM*, "China Imposing Licensing System of Steel Exports" (May 1, 2007).

<sup>123</sup> See *AMM*, "China Export Tax Shifting Focus to High-Value Steel" (July 30, 2007). This article notes a shift away from exports of lower value products, such as rebar, and toward higher value items such as heavy plate and galvanized steel coil.

<sup>124</sup> *Ibid.*, "Potential Wire Flood Perturbs Rod Producers" (June 7, 2007); *Global Insight. Steel Monthly Report* (September 2007), p. 6.

range of inputs. These steps could be viewed as helping the competitive position of China's steel industry by keeping raw materials at home. In April 2007, at the time of a U.S.-China economic dialogue, China eliminated the 8% rebate altogether on some flat-rolled products, and reduced it from 11% to 5% on others. However, China left in place the 11% rebate on steel pipe and tube exports. In May 2007, China added export duties to steel bar and rod exports. In June 2007, after China was included in a U.S. producers' trade petition on pipe and tube, China announced it would end the export rebates offered on these products as of July 1, 2007. But this decision excluded oil country tubular goods, on which the ITC had just revoked remedy duties on imports from other countries (see below).<sup>125</sup>

**China's Foreign Investment Policy on Steel.** In view of the relative fragmentation of China's steel industry, which still makes Chinese companies potential targets in an era of international consolidation and strong domestic growth, the Chinese government also included steel companies in a proposed new foreign investment review procedure. In its Steel Policy of 2005, China banned foreign acquisition of large steel mills, because it apparently believed they would be especially vulnerable to takeovers during a period of restructuring of state-owned assets. In mid-2006 the Ministry of Finance announced a new foreign investment review body, to be organized under the NDRC, for the purpose of protecting national "economic safety" in cases of acquisitions by foreign investors. In December 2006 new guidelines for state-owned enterprises did not include steel on the list of seven industries considered most crucial for national security. This left it open to speculation that the industry would be made more responsive to market pressures, and that foreign investors could play a role in industry consolidation.<sup>126</sup>

China's steel industry remains atomized, but like the industry globally it is undergoing consolidation. In 2005, there was only one Chinese company in the top 10 internationally, and only two in the top 20. As indicated in **Table 1**, by 2006 there were two in the top ten: Shanghai Baosteel and Tangshan, producing 23 million MT and 19 million MT, respectively. Three other Chinese companies were in the top 20, giving China a total of one-quarter of the companies at this level.

Whatever the implications that may be drawn from the Chinese government's official statements on foreign investment, there is no apparent indication that it intends to liberalize investment procedures in the steel industry. While Mittal Steel was able to make one minority investment in a Chinese steel tube manufacturer, the

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<sup>125</sup> Kemp USTR interview (June 22, 2007) was extremely helpful in listing and analyzing the principal Chinese policy actions. Some of them were described and listed in various issues of *AMM* and there was a systematic listing through April 2007 in CCCMC, *China's Steel Industry*, attachment 1, but this is now out of date, and also difficult to read without detailed knowledge of harmonized tariff codes.

<sup>126</sup> *Ibid.*, "China to Step Up Scrutiny of Some Foreign Holdings" (June 20, 2006), p. 6; and "China May Loosen Grip on Steel, Nonferrous" (December 20, 2006), p. 4; Bureau of National Affairs. *Daily Report for Executives (DER)*, "China Sets New Guidelines to Consolidate Government Ownership of Key Industries" (December 20, 2006), p. A-2. But also see, *Washington Post*, "China Gets Cold Feet for Foreign Investment" (February 2, 2007), p. D1.

successor company, ArcelorMittal, has been reportedly unsuccessful in seeking to make large minority investments in other major Chinese steel companies. These investments have reportedly been stalled by NDRC scrutiny, and by preference for solutions involving only Chinese companies.<sup>127</sup>

**Congressional Reaction to Competition from China.** Congress has been concerned regarding the competitive impact of competition from China that has been deemed unfair, although it has not considered legislation specifically aimed against imports of steel or steel products. Many Members of Congress and representatives of U.S. steel producers and consumers appear to feel that the issue of Chinese subsidization is even broader than the types of measures that may be addressed in the WTO case.<sup>128</sup>

China's government has maintained a fixed exchange rate against the dollar, leading many U.S. manufacturers to claim that in two-way trade this is unfair, because China's currency value does not reflect the country's growing industrial competitiveness. In the 109<sup>th</sup> Congress S. 295, co-sponsored by Senators Charles Schumer and Lindsey Graham, would have added a 27.5% tariff to all imports from China unless the President could certify within six months that China is no longer manipulating its exchange rate. It was included as an amendment to the Foreign Affairs Authorization Bill (S. 600, Title XXIX) on April 6, 2005, when the Senate voted 67-33 not to table the amendment. The sponsors agreed to withdraw the amendment, provided they were guaranteed a floor vote within six months on S. 295. In July 2005 the Bank of China announced a new exchange rate policy, which tied its currency to an international currency "basket," rather than directly to the dollar — a policy change that had the effect of a slight upward revaluation. The Senate subsequently agreed further to postpone floor action in consideration of other steps that the Chinese government might take.<sup>129</sup>

U.S. steel producers joined with their customers in the 109<sup>th</sup> Congress to support legislation that would allow U.S. producers to bring countervailing duty (CVD) cases against exporters alleged to be receiving government subsidies from governments of countries that are designated nonmarket economies, such as China. Commerce Department enforcement policy has been not to bring CVD cases in these

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<sup>127</sup> *AMM.com*, "Chinese Steelmaker Laiwu Iron Focuses on Developing Quality, Not Quantity" (April 26, 2007); "Beijing Backs Baosteel's Takeover of Baotou Iron & Steel" (April 30, 2007); and, "Asia: The Silk Curtain Is Slowly Closing on Foreign Investment" (July 1, 2007).

<sup>128</sup> See comments in *AMM*, "US Case vs. China" (February 5, 2007), for example, as well as the legislative initiatives that are described below.

<sup>129</sup> CRS Report RS21625, *China's Currency: A Summary of the Economic Issues*, by Wayne M. Morrison and Marc Labonte. See floor speeches of co-sponsoring Sens. Graham and Schumer on November 16, 2005 (*Congressional Record*, S12924-95). The principal co-sponsors announced in March 2006 a further indefinite postponement of seeking action on the measure, following discussions with high-level representatives of the Chinese government. See *New York Times*, "Trade Truce with China in the Senate" (March 29, 2006); and, *AMM*, "Schumer-Graham Bill to Impose Punitive Tariff on China Stalls Out" (October 2, 2006), p. 11.

circumstances, but rather to require U.S. producers to seek trade relief exclusively through antidumping laws.<sup>130</sup> On July 27, 2005, the House passed, by a vote of 255-168, H.R. 3283, a bill introduced by Representative Philip English, that would have applied U.S. countervailing duty law to nonmarket economies (NMEs, such as China), require extensive monitoring of China's commitments on trade and intellectual property rights, and require the Treasury Department to report on China's new currency mechanism. The Senate took no action on this legislation during the 109<sup>th</sup> Congress.

Since then, the Treasury Department has reviewed China's exchange rate policy, as part of its semi-annual report to Congress on the dollar exchange rate and foreign currency policies. During this period, the Treasury Department has yet to designate China as a currency manipulator for trade advantage.<sup>131</sup> A number of bills have been introduced in the 110<sup>th</sup> Congress to address this issue, in an effort to encourage the Bush Administration to take more aggressive action against alleged Chinese currency manipulation, including trade sanctions, or remedies to assist affected U.S. producers. The following analysis of these bills is excerpted from CRS Report RL32165, *China's Currency: Economic Issues and the Options for Trade Policy*, by Wayne M. Morrison and Marc Labonte:

- H.R. 321 (English) would require the Treasury Department to determine if China has manipulated its currency and to estimate the rate of that manipulation (if such a determination were made), which then would require the imposition of additional tariffs on Chinese products (equal to the estimated rate of manipulation). The bill also calls on the United States to file a WTO case against China over its currency policy and to work within the WTO to modify and clarify rules regarding currency manipulation.
- H.R. 782 (Tim Ryan) S. 796 (Bunning) would apply U.S. countervailing laws (dealing with government subsidies) to products imported from non-market economies (such as China) and would establish an alternative methodology for estimating the amount of government subsidy benefit provided if information is not available on the amount of subsidies given to various industries in that country. The bills also make exchange rate misalignment actionable under U.S. countervailing law, require the Treasury Department to determine whether a currency is misaligned in its semi-annual reports to Congress on exchange rates, prohibit the Department of Defense from purchasing certain products imported from China if it is determined that China's currency misalignment has disrupted U.S. defense industries, and would include currency misalignment as a factor in determining (China-specific) safeguard measures on imports of Chinese products that cause market disruption.

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<sup>130</sup> For details on this issue, see CRS Report RL32371, *Trade Remedies: A Primer*, by Vivian C. Jones.

<sup>131</sup> The issue is summarized in CRS Report RS21625, *China's Currency: A Summary of the Economic Issues*, by Wayne M. Morrison and Marc Labonte.

- H.R. 1002 (Spratt) would impose 27.5% in additional tariffs on Chinese goods unless the President certifies that China is no longer manipulating its currency.
- H.R. 2942 (Tim Ryan) would apply countervailing laws to nonmarket economies, make an undervalued currency a factor in determining antidumping and countervailing duties, require Treasury to identify fundamentally misaligned currencies and to list those meeting that criteria for priority action. If consultations fail to resolve the currency issues, the USTR would be required to take action in the WTO.
- S. 364 (Rockefeller) would apply U.S. countervailing laws on non-market economies and would make exchange rate manipulation actionable under such laws.
- S. 1607 (Baucus) would require the Treasury Department to identify currencies that are fundamentally misaligned and to designate such currencies for priority action under certain circumstances in its semi-annual reports to Congress on exchange rates. If after consultations the country maintaining the designated currency policy fails to adopt appropriate policies within 180 days, the U.S. would make currency undervaluation a factor in determining antidumping duties, ban federal procurement of products or services from the designated country, bar financing by the U.S. Overseas Private Investment Corporation (OPIC), and would require U.S. officials to oppose multilateral financing for that country. If the designated country failed to take appropriate measures, the USTR would be required to file a case in the WTO, and the Treasury Department would be directed to consider taking remedial intervention in international currency markets. A modified version of the bill passed the Senate Finance Committee on July 31, 2007.
- S. 1677 (Dodd) requires the Treasury Department to identify countries that manipulate their currencies regardless of their intent and to submit an action plan for ending the manipulation; and gives Treasury the authority to file a case in the WTO. The bill was approved by the Senate Banking Committee on August 1, 2007.<sup>132</sup>

As it has done twice before, and within a few days of the June 2007 Treasury report, the Office of the USTR rejected a petition under Section 301 of U.S. trade law to bring a case against China on currency manipulation. The steel industry was among those joining the petition. USTR Susan Schwab stated the Administration's policy that "firm engagement with China, in concert with international institutions and other countries," was "likely to be more productive" than following a process under U.S. trade law.<sup>133</sup>

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<sup>132</sup> CRS Report RL32165, *China's Currency: Economic Issues for U.S. Trade Policy*, by Wayne M. Morrison and Marc Labonte. For a press analysis from the steel industry perspective on Senate Finance approval of S. 1607, see *AMM*, "Currency Bill Gets Panel OK, Not Treasury's" (July 30, 2007).

<sup>133</sup> *Ibid.*, "Engagement with China Key, USTR Says in Axing '301' Petition" (June 15, 2007), p. 2.



Meanwhile, the Chinese government intervened in a U.S. antidumping case to request that its designation be changed to that of a market economy for the purposes of U.S. antidumping law. On December 22, 2005, the Department of Commerce received a request from respondents in an antidumping investigation on imports of lined paper (A-570-901) to revise U.S. policy and to designate China as a market economy. On February 2, 2006, Commerce also received a submission from the Chinese government in support of this request. But the Commerce Department found that “despite recent and ongoing reform efforts, the significant extent of continued government intervention in certain important sectors of the economy warrants maintaining China’s designation as an NME country.”<sup>134</sup>

Later in 2006 the Commerce Department instituted an investigation into allegedly dumped and subsidized imports of paper from Asian countries, including China. This is the first CVD investigation since 1991 to target an NME. On December 15, 2006, the ITC found material injury to domestic producers in the case, allowing it to proceed. On the same day, the Commerce Department requested public comments on application of U.S. CVD laws to imports from China.<sup>135</sup> Responding to this request on January 19, 2007, Representatives English, Artur Davis, Peter Visclosky and 29 other House members, including many from the Congressional Steel Caucus, wrote that it was their “strong contention that countervailing duty law should be applied to nonmarket economy countries ...” and that it is “a fundamental misinterpretation of current law to not apply CVD law to NME countries.”<sup>136</sup> On April 9, 2007, the Commerce Department International Trade Administration announced a preliminary determination that countervailable subsidies were being provided by the Chinese government to the paper industry, and that determination was confirmed on October 18, 2007.<sup>137</sup>

On August 1, 2007, Senator Max Baucus, chair of the Finance Committee, and two co-sponsors introduced another trade bill, S. 1919, which, in part, deals with the NME issue. Section 401 of this bill is similar to other legislation by including NMEs under CVD rules. Unlike the other bills concerned with subsidization in NMEs, however, this one is silent on the currency manipulation issue.<sup>138</sup>

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<sup>134</sup> U.S. Dept. of Commerce. “Fact Sheet: The People’s Republic of China’s Request for Review of Non-Market Economy Status,” and “The People’s Republic of China (PRC) Status as a Non-Market Economy (NME),” memorandum, antidumping investigation A-570-901 (May 15, 2006).

<sup>135</sup> *DER*, “ITC Sees Possible Injury from Asian Paper; Commerce Seeks Comment on Chinese CVDs” (December 18, 2006), p. A-12; U.S. Dept. of Commerce. International Trade Administration. “Application of the Countervailing Duty Law to Imports from the People’s Republic of China: Request for Comment,” *Federal Register* (December 15, 2006), p. 75507.

<sup>136</sup> Reps. Artur Davis, Philip English, *et al.* Letter to Secretary of Commerce Carlos Gutierrez (January 19, 2007).

<sup>137</sup> *Federal Register* (April 9, 2007), esp. p. 17486, and, (October 25, 2007), pp. 60645-48; *AMM*, “Subsidy Duties vs. China Hold; Industry Cheers” (October 22, 2007).

<sup>138</sup> *Congressional Record* (August 1, 2007), S10609-10; *AMM*, “New Bill Attempts to Plug (continued...)”

## Steel Policy Issues

### Failure to Achieve a Global Steel Subsidies Agreement

In recognition of the global nature of steel industry issues, President Bush proposed international discussions on the elimination of excess steel capacity and restrictions on future domestic industry subsidies, as part of his general steel policy announcement of 2001. Other governments agreed to join representatives of the Bush Administration in discussing overcapacity and trade issues under the auspices of the Organization for Economic Cooperation and Development (OECD), in a process that started in mid-September 2001. The industrial, steel-producing members of the OECD were joined by major non-OECD steel producers, such as India, Russia, and, during later stages of the talks, China. The early stages produced indications by participating governments of capacity reductions totaling about 140 million MT of crude steelmaking capacity that could be made in their countries by the end of 2005.<sup>139</sup> But this was not followed by definitive commitments to close capacity, nor have the participants agreed on the basis for an international agreement to end domestic subsidies to the steel industry. Negotiations were suspended indefinitely in 2004, though the parties agreed to continued future meetings.

By June 2003, the OECD's staff had reportedly constructed a draft proposal that outlined compromise proposals on "six elements negotiators believe are crucial in forming the framework of an agreement."<sup>140</sup> But the parties deadlocked beyond that point, as the recovery of global steel markets and the subsequent end of the U.S. safeguard tariffs seemed to reduce the impetus for compromise. Countries such as Brazil and India want a recognized right to continue to subsidize certain aspects of their steel industries, and rejected any offer to accept a phase-in period to full elimination of subsidies. There was also a related issue as to whether subsidies should still be countervailable, even if they are notified by signatories and are considered legitimate under exceptions to an agreement. The United States, on the one side, and Japan and the EU on the other, differed as to whether subsidies should be allowed for R&D activities and environmental upgrades, as might be required, for example, by the Kyoto Treaty on Climate Change. The U.S. steel industry itself consistently lobbied the U.S. Administration to oppose any international acceptance of steel industry subsidies, except as related to a plant closure.<sup>141</sup>

While the basic principle of far-reaching subsidies discipline was apparently accepted, no agreement could be reached by mid-2004. At that point participants

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<sup>138</sup> (...continued)

Holes in How Trade Issues Are Handled" (August 3, 2007), p. 4.

<sup>139</sup> This estimate was cited in *DER*, "Major Steel-Producing Countries Launch Talks on Banning Subsidies at OECD Meeting" (December 20, 2002).

<sup>140</sup> Nancy E. Kelly, "Steel Talks to Kick Off in Paris, Six Issues Seen Hot for Debate," *AMM* (June 10, 2003).

<sup>141</sup> The major issues and course of the talks were reviewed in detail in CRS Report RL31842, *Steel: Section 201 Safeguard Action and International Negotiations*, by Stephen Cooney, pp. 35-40 (out of print, but available from author).

agreed that, while the OECD would continue to monitor developments in steel markets, further discussions would be suspended pending a review in early 2005.<sup>142</sup> But a January 2005 meeting at the OECD produced no further evident progress in the discussions. A number of private sector U.S. representatives of the steel industry at the discussions stated that many governments were further subsidizing new steelmaking capacity as the global market for steel boomed. The OECD members present did agree to continue the operations of the Steel Committee.<sup>143</sup>

To further preparations for this meeting, OECD staff drafted a proposed “blueprint” for a steel subsidies agreement. It was generally designed to ban a broad range of steel industry subsidies across the board; in commentaries on the blueprint, OECD officials stated that 90% or more of historical subsidies would be prohibited. The details of the document proposed a series of solutions to outstanding issues.

A major issue was “actionability,” e.g., subjection of subsidies to trade remedy laws. If a proposed subsidy were notified to the review committee that was to be formed under the proposal, and this were duly “approved” by that committee by “consensus” (unanimity), then subsidies should not be countervailable under trade laws of participating countries. The OECD staff claimed that “all subsidies that are actionable, remain actionable,” and that proposed *de minimis* standards in the blueprint actually reduced the levels that are allowed anyway under U.S. trade law.<sup>144</sup>

Representatives of the American steel industry reacted negatively to the blueprint. Most discussion focused on “exceptions” that would be permitted, and types of payments that would constitute allowable subsidies. An executive of U.S. Steel, for example, was especially concerned about the question of “actionability,” that is, subsidies allowed under the agreement could not be subject to U.S. trade remedy laws. The general view of the industry, as reported in trade journal articles, was that an agreement designed to ban subsidies should not instead focus on carving out exceptions to subsidy discipline.<sup>145</sup>

By October 2005 the responses to the OECD staff blueprint did not indicate that the participating countries were moving toward a consensus on outstanding issues.

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<sup>142</sup> The official paper describing the state of negotiations in addressing key issues is OECD SG/STEEL (2004)3. “Steel Agreement Issues” (June 29, 2004). Reports on the stalemate include *DER*, “OECD Steel Subsidy Talks Suspended Until 2005” (June 30, 2004), p. A-1; *Inside U.S. Trade*, “Countries Agree to Shelve Formal OECD Steel Talks” (June 28, 2004).

<sup>143</sup> *AMM*, “High Steel Demand Cited for Killing Global Subsidy Deal” (January 19, 2005), p. 1.

<sup>144</sup> OECD. “Blueprint for a Steel Subsidies Agreement,” attachment to letter from Deputy Secretary General Herwig Schlögl (March 31, 2005); and, “Steel Subsidies Agreement: Blueprint,” presentation by Wolfgang Hübner to AISI/SMA (May 17, 2005). Reports on development and release of the blueprint were in *AMM*, “Steel Subsidy Talks Get Another Chance to Work” (March 24, 2005); and, “OECD Delivers Blueprint for Steel Subsidies Pact” (April 4, 2005).

<sup>145</sup> *AMM*, “Pre-Agreed OECD Subsidies Dubbed a ‘Deal-Killer’ for U.S.” (April 8, 2005); and, “OECD’s Blueprint Bites into Steel Subsidy Limits” (May 18, 2005).

The OECD therefore terminated the high-level discussions.<sup>146</sup> The OECD Steel Committee, comprised of representatives of member governments and other invited participants, continues in existence. In future meetings, the committee may review steel industry developments in Asian countries, raw material issues, and globalization of the steel sector.<sup>147</sup>

## Repeal of the Byrd Amendment

Related in part to the financial difficulties of the U.S. steel industry in the late 1990s, the Continued Dumping and Subsidy Offset Act (CDSOA), was signed into law in October, 2000. The CDSOA is known as the “Byrd Amendment,” because the West Virginia Senator added it to the FY2001 Agriculture appropriations bill (P.L. 106-387).<sup>148</sup> It requires antidumping and countervailing duties to be deposited in a special account and distributed annually to domestic industry petitioners, who meet eligibility criteria, to offset expenses incurred as a result of the dumped or subsidized imports. Steel companies benefitted from distributions under this law, which was successfully challenged in the WTO. The U.S. government lost its appeal and said that it would comply with the WTO finding.<sup>149</sup> Both houses of Congress approved a bill that included repeal of this provision, but required the distribution of duties collected on entries of goods made and filed before October 1, 2007 (P.L. 109-171, §7601). The repeal went into effect as scheduled, and AD/CVD duties henceforth will revert directly to the U.S. Treasury Department.<sup>150</sup> Some U.S. trading partners did not consider this an adequate implementation of the WTO ruling.

The U.S. steel industry has generally been a major recipient of the customs duties distributed under the Byrd Amendment. “At least \$1.4 billion in Byrd Amendment payouts have been distributed since 2001, two-thirds of which went to only three industries: bearings, steel and candles,” according to one source.<sup>151</sup> For Fiscal Years 2001-04, steel companies received disbursement checks totaling \$129 million out of a total of \$1.035 billion, according to GAO calculations. U.S. Steel was the largest recipient in the industry, at \$22.6 million. AK Steel received \$11.3 million. ISG received a total of \$10.4 million during this period, while one of its predecessor companies, Bethlehem Steel, received \$6 million before its acquisition by ISG. The other major steel industry recipients were three stainless and specialty

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<sup>146</sup> *DER*, “OECD Calls Off Deadlocked Multilateral Steel Negotiations” (October 7, 2005).

<sup>147</sup> Communication to CRS from U.S. Dept. of Commerce. International Trade Administration (January 11, 2006); *AMM*, “Long-Dead Steel Subsidy Talks Still Influential: OECD Official” (June 19, 2006 print ed.), p. 2.

<sup>148</sup> Included as Title X; codified at 19 USC §1675c.

<sup>149</sup> For a summary history of the measure, see CRS Report RL33045, *The Continued Dumping and Subsidy Offset Act (‘Byrd Amendment’)*, by Vivian C. Jones and Jeanne J. Grimmatt.

<sup>150</sup> *AMM*, “Consumers Cheer As Byrd Makes Final Landing” (October 3, 2007), p. 8.

<sup>151</sup> *Ibid.*

steel producers, Carpenter Technology, Allegheny Ludlum and North American Stainless, which each received between \$10 million and \$13 million.<sup>152</sup>

By far the leading beneficiary of Byrd Amendment disbursements was the Timken Company, a major manufacturer of roller bearings and steel used in bearings, and other bearing manufacturers that Timken acquired or controlled. According to the GAO, \$205 million was paid out in 2001-04 to Timken alone, while a further \$135 million was paid out to Torrington (a company acquired by Timken in 2003), and \$55 million was paid to MPB Corporation, a subsidiary of Timken. These amounts totaled nearly \$400 million, accounting for almost all the funds distributed to the U.S. domestic bearings industry, and about 40% of all duties distributed under the Byrd law.<sup>153</sup>

For FY2005, this pattern continued, albeit with some adjustments. Overall, total disbursements under the program fell from \$284 million to \$227 million, with more than a third of the funds again going to Timken (\$81 million). U.S. Steel's receipts took a large one-year drop from \$7.1 million to \$1.5 million, while the total received by the newly formed Mittal Steel, including its subsidiaries, was more than \$3 million. The leading steel industry recipient in FY2005 was AK Steel, which received \$7.1 million. Stainless and specialty steel companies were again among the leading recipients, while the only minimill operator to receive more than \$1 million was Gerdau.<sup>154</sup>

The Bush Administration proposed repeal of the Byrd Amendment in its FY2004-06 budget requests, on the grounds not only of the need to comply with WTO rulings, but also because it argued that the law represented a form of "double-dipping" and corporate welfare. Legislation to modify or repeal the law was introduced in the Senate in the 108<sup>th</sup> Congress, but no action was taken on these measures.<sup>155</sup> In the 109<sup>th</sup> Congress, H.R. 1121, a measure to repeal the Byrd Amendment, was introduced on March 3, 2005, by Representative Jim Ramstad, a member of the Ways and Means Committee, and co-sponsored by Representative Clay Shaw, chairman of that committee's Trade Subcommittee. The Consuming Industries Trade Action Coalition, which has consistently opposed steel industry trade policy efforts, announced that repeal of the law was a top priority in the 109<sup>th</sup>

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<sup>152</sup> U.S. Government Accountability Office. *Issues and Effects of Implementing the Continued Dumping and Subsidy Offset Act*, GAO Report 05-979 (September 2005), fig. 8 and tab. 8.

<sup>153</sup> *Ibid.*, tab. 5. The skewed distribution of funds under the law was a major point made in comments by the GAO, and critics such as House Ways and Means Committee Chairman Bill Thomas; see "Trade Law Opponents Point to Stats from GAO," *Washington Post* (September 27, 2005). Discussion of the reasons for this distribution and further analysis are in CRS Report RL33045.

<sup>154</sup> *AMM*, "More or Less, It's a Nice Chunk of Change" (December 12, 2005 print ed.), p. 2.

<sup>155</sup> CRS Report RL33045.

Congress.<sup>156</sup> The GAO found that, “Some steel companies acknowledged that the CDSOA disbursements have not been significant in relation to their size or capital expenditure needs,” and that disbursements for many amounted to less than 1% of net sales in a recent fiscal year. But it also found that the industry generally agreed that the law has had a “positive impact.”<sup>157</sup> Both the steel industry and the USWA strongly supported keeping the law in place.<sup>158</sup>

On October 26, 2005, with the support of Chairman Bill Thomas, the House Ways & Means Committee added repeal of the Byrd Amendment to a budget reconciliation package. A motion to delete the Byrd repeal, offered by Representative Stephanie Tubbs Jones, was defeated 21-18. The full package was then approved in committee 22-17.<sup>159</sup> Repeal of the provision thus became part of the bill on budget reconciliation and deficit reduction (H.R. 4241), which went to the House floor, where it was approved on November 18, 2005, by a vote of 217-215.<sup>160</sup> Subsequently, the Senate voted 72-19 to instruct conferees on the legislation not to accept any repeal of the Byrd Amendment.<sup>161</sup> Nevertheless, a modified version of the repealer was included in S. 1932, the conference report on the Deficit Reduction Act of 2005. The bill was passed by the Senate on December 21, 2005, on a vote of 51-50, decided by the casting vote of Vice President Cheney.<sup>162</sup>

In the House-Senate conference on S. 1932, the effective date of repeal was pushed back until October 1, 2007, reportedly at the insistence of Senator Larry Craig.<sup>163</sup> On the floor, a colloquy between Senator Craig and Majority Leader Bill Frist clarified that duties assessed under antidumping and countervailing duty (AD/CVD) orders on entries of imports before that date will be distributed to eligible supporters of the orders, as specified in the law, even though final distribution may occur after that date.<sup>164</sup>

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<sup>156</sup> *AMM*, “CITAC Adds Muscle to Push Repeal of Byrd Amendment” (February 18, 2005), p.1.

<sup>157</sup> GAO Rept., p. 70.

<sup>158</sup> See, for example, *Washington Post*, “... Stats from GAO,;” on quotes from USWA President Gerard; and, *AMM*, November 21, 2005, and November 28, 2005 print ed. on steel industry reaction to inclusion of Byrd Amendment repeal in House legislation.

<sup>159</sup> *DER*, “Ways and Means Committee Approves Repeal of Byrd Law” (October 27, 2005), p. A-25.

<sup>160</sup> *AMM*, “House Repeals Byrd, Senate Fate Uncertain” (November 21, 2005), p. 1.

<sup>161</sup> *DER*, “Senate Urges Conferees to Drop Byrd Law Repeal from Budget Bill” (December 16, 2005), p. A-9.

<sup>162</sup> *Inside U.S. Trade*, “Bill Containing Byrd Repeal Clears Senate with Cheney’s Vote” (December 21, 2005); *Washington Post*, “Senators Vote to Kill Trade Law” (December 22, 2005), p. D1; *Wall St. Journal*, “U.S. Firms Face Loss of Trade-Duty Revenues” (December 23, 2005).

<sup>163</sup> *Congress Daily*, “‘Byrd’ Repeal in Budget Measure Contains Key Compromise” (December 20, 2005).

<sup>164</sup> *Congressional Record* (December 21, 2005), S14206.

The EU, Canada, Japan and Mexico, which were involved in the WTO case against the Byrd Amendment policy, have implemented retaliatory tariffs as authorized by the WTO. The annual total of these tariffs against U.S. exports is \$114 million. They remain in place, pending the final repeal of the law, and some of the complainant governments have indicated concern that trade remedy duties collected by October 1, 2007, will continue to be disbursed.<sup>165</sup> Distributions continue to be administered under the Byrd Amendment. The FY2006 distribution was scheduled to include at least \$41 million to Timken from Japanese and German bearings cases, and \$7.2 to U.S. steelmakers from hot-rolled steel and stainless steel strip from Japan.<sup>166</sup>

## **Industry Petitioners Lose Wire Rod Antidumping Case — Pursue Others**

As noted in a Congressional Budget Office analysis, the steel industry is by far the largest user of U.S. AD/CVD orders. The CBO in 2004 counted 131 AD/CVD orders against imports of steel mill products then in place, plus a further 30 orders against imported iron and steel pipe products, and 30 orders against assorted other iron and steel products.<sup>167</sup>

On November 10, 2005, five U.S. producers of carbon and alloy steel wire rod joined in a petition to the Commerce Department, alleging that they were being injured by imports of this product from China, Turkey and Germany. The petitioners especially focused on China, stating that Chinese producers were being “aggressive,” and noting margins of 300%, compared to lower margins for the other countries. Imports from the three countries increased from 12% of the U.S. market in 2002 to a quarter of the market or more in 2004 and the first half of 2005, according to the petitioners.<sup>168</sup>

On December 1, 2005, the ITC held its hearing on the preliminary determination of material injury, listening to the petitioners, as well as representatives of wire rod users, who claimed that imports were necessary, following shortages experienced in

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<sup>165</sup> *DER*, “Trade Partners Give Cautious Response to U.S. Movement on Byrd Amendment” (January 23, 2006), p. A-1. On May 1, 2006, the EU raised its trade sanctions against the Byrd Amendment by about 30%, to \$37 million per year; European Commission. “EU Imposes Revised Measures in Response to Continued US Byrd Amendment Payments,” press release (May 1, 2006). The response of the U.S. government to continued sanctions was that it fully implemented WTO findings by repealing the Byrd Amendment; WTO. “2006 News Items — Dispute Settlement Body” (June 19, 2006), pp. 4-5.

<sup>166</sup> *Ibid.*, “Byrd Still Has Wings” (June 18, 2007), p. 10.

<sup>167</sup> Congressional Budget Office. “Economic Analysis of the Continued Dumping and Subsidy Offset Act of 2000,” attachment to letter from Director Douglas Holtz-Eakin to Rep. Bill Thomas, Chairman, House Ways and Means Committee (March 2, 2004), p.3. The CBO count pre-dated the December 2006 decision to terminate 17 AD/CVD orders on imports of corrosion-resistant carbon steel and cut-to-length steel plate, as discussed below.

<sup>168</sup> *AMM*, “U.S. Wire Rod Makers Rap Imports from 3 Nations” (November 14, 2005), p. 1.

2004.<sup>169</sup> On December 23, 2005, the ITC announced, in a unanimous 6-0 decision, a negative injury finding that terminated the case.<sup>170</sup>

While fewer AD/CVD cases have been brought by the steel industry in recent years, it is continuing to use this instrument to defend its trade interests. In June 2007, six U.S. producers of welded steel pipe and the USWA filed a new petition asking for AD and CVD duties to be placed on imports of pipe not more than 16” in diameter from China, and the ITC in July voted for a preliminary finding of injury. It also voted similarly in July in a case involving imported nails from China and the United Arab Emirates. In both cases, the ITC vote was unanimous.<sup>171</sup> The only remaining U.S. producer of steel wire garment hangers, M&B Metal Products of Alabama, filed a regular AD case in July 2007 against imports from China, after his industry failed to receive remedy assistance in a China safeguard case (see below). He also won a unanimous ITC preliminary determination of injury.<sup>172</sup> The ITC also made a preliminary determination in August 2007 of injury in a case brought by the U.S. pipe and tube industry on light-walled steel rectangular pipe and tube imports from China, Mexico, Korea, and Turkey.<sup>173</sup>

## President Bush Denies Relief in China Safeguard Case

While the ITC rejected the wire rod producers’ antidumping case, it had ruled in favor of a safeguard petition brought by steel pipe producers under the special China safeguard provision of Section 421 of the 1974 Trade Act.<sup>174</sup> The Section 421 safeguard was negotiated with China as part of the U.S. agreement to China’s WTO accession package, and added by Congress to U.S. trade law in 2000. But as in three previous cases on which the ITC had recommended remedies under this provision, including one case involving steel wire used in coat hangers, President Bush rejected any safeguard remedies.

Safeguard actions are different from AD/CVD cases, in that petitioners do not have to demonstrate actions by exporters that are deemed unfair under U.S. trade law. In a regular safeguard case, however, petitioners do have to demonstrate “substantial” injury, e.g., injury from imports that is greater than any other cause. In a China safeguard case, petitioners need only demonstrate a lesser standard of injury, that of

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<sup>169</sup> *AMM*, “He Said, She Said as Rod Case Commences” (December 5, 2005 print ed), p. 2.

<sup>170</sup> USITC. News release 05-152, “ITC Votes to End Cases on Carbon and Certain Alloy Steel Wire Rod from China, Germany and Turkey,” Investigation nos. 731-TA-1099-1101 (December 23, 2005); *DER*, “ITC Finds No Injury from Imports of Wire Rod from China, Germany, Turkey” (December 28, 2005), p. A-15; *AMM*, “ITC Finds No Import Injury, Rejects Steel Wire Rod Case” (December 28, 2005), p. 1.

<sup>171</sup> *AMM*, “Six Welded Pipe Producers Petition for Duties vs. China” (June 11, 2007); and “ITC Ruling on Pipe May Provide Long-Term Help” (August 1, 2007), p. 4.

<sup>172</sup> *Ibid.*, “Last US Maker of Wire Hangers Files Petition for Import Relief;” and, “ITC Votes 6-0 to Continue Its Probe into Chinese Wire Hanger Imports” (September 25, 2007), p. 6.

<sup>173</sup> *Ibid.*, “ITC Opts for Duties on Rectangular Pipe” (August 13, 2007), p. 2.

<sup>174</sup> 19 U.S.C. § 2451.



“market disruption” caused by rising imports from China. Review of the evidence and presidential decision on remedy are expedited by comparison with a regular safeguard action. Unlike a regular safeguard case, remedies apply only to imports from China, not to all imports, and China is authorized to retaliate against equivalent amounts of U.S. exports within two to three years, depending on the basis of the U.S. finding.<sup>175</sup>

On August 2, 2005, seven domestic steel pipe and tube manufacturers and the USWA filed a petition under Section 421. They alleged market disruption from rapidly rising imports of standard pipe (circular welded non-alloy steel pipe) from China. In filing the petition, they noted a surge in imports from China, from less than 10,000 tons in 2002, to 90,000 tons in 2003, 266,000 tons in 2004, and 182,000 tons in the first half of 2005. “In spite of strong market demand, the import surge has forced us to lay off a quarter of our employees,” said the president of Wheatland Tube, one of the petitioning companies. Overall, petitioners said 2,500 workers in the industry were threatened by the rise in imports from China. The petitioners requested an annual quota of 90,000 tons on the subject imports.<sup>176</sup>

On October 3, 2005, the ITC found in a 4-2 vote that standard steel pipe imports from China were causing, or threatened to cause, market disruption in the United States. Among those voting affirmatively, the remedy recommendations differed. Two commissioners found for market disruption and wanted a three-year quota of 160,000 tons per year. Two other commissioners found that increased imports were only threatening market disruption, and therefore proposed a more lenient tariff rate quota: a 25% tariff on all imports from China above 267,000 tons in the first year. The quota would rise proportionally in the subsequent two years. The remaining two commissioners dissented from the injury findings. They noted rising prices and profits in the industry following tight supply conditions in 2004. They found that prices fell in 2005, not because of increased imports, but because of the working off of overstocked inventories.<sup>177</sup>

Representatives of the USWA and U.S. pipe manufacturers lobbied the Bush Administration to grant relief after the announcement of the ITC finding. They were joined by some Members of Congress. Twenty Senators and 61 Representatives reportedly endorsed letters urging President Bush to grant quota relief.<sup>178</sup>

But on December 30, 2005, President Bush refused to provide any trade relief. He made this decision on two grounds. First, it was noted that the ITC record showed that “more than 50” third countries supplied pipe to the U.S. market. Applying a quota to Chinese imports under Section 421 would likely be “ineffective,” the Administration argued, as many other countries could fill the subsequent import void. Secondly, the Administration stated that, “according to ITC

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<sup>175</sup> For details, see CRS Report RL32371, *Trade Remedies: A Primer*, by Vivian C. Jones.

<sup>176</sup> *AMM*, “US Producers Seek Relief from Chinese Pipe Imports” (August 3, 2005), p. 1.

<sup>177</sup> USITC. *Circular Welded Non-alloy Steel Pipe from China*, Investigation no. TA-421-6 (Publ. 3807, October 2005).

<sup>178</sup> *AMM*, “Politicians Back Plea for Relief vs. China Pipe” (December 2, 2005), p. 1.

estimates,” the costs of import relief to U.S. consumers would be four to five times greater than the benefits gained by domestic producers (depending on which ITC remedy was used). Therefore, the President decided that relief was not in the national economic interest.<sup>179</sup>

As might be expected, the domestic steel industry was critical of the presidential decision not to take any action. At least one pipe mill has closed since the decision was announced, reportedly because of the pressures of increasing domestic costs and direct competition with imports from China.<sup>180</sup> On the other hand, the American Institute for International Steel, representing importers, and the Chinese government both voiced support for the decision. An official statement of the Chinese Ministry of Commerce noted that this was the fourth consecutive time that President Bush had declined to provide relief under this section of the trade law, and that this policy “will benefit the health and steady development of the two countries’ trading relationship.”<sup>181</sup>

Senator Rockefeller’s trade bill, S. 364, some provisions of which were discussed earlier, would eliminate the President’s discretion not to implement the ITC’s recommended course of action in China safeguard cases. Title IV of the legislation would provide, in event of an affirmative decision by the ITC, that the President would have to implement the remedy relief proposed by a majority of the ITC. Section 301 of S. 1919, introduced by Senator Baucus, would also essentially require the President to adopt positive recommendations of the ITC for trade remedy relief in a 421 safeguard case.

## **ITC Revokes Duties for Steel Flat Products in 2006**

Under U.S. trade law, in compliance with WTO rules, AD/CVD actions are reviewed systematically after five years. This is to determine if penalized foreign action — dumping or subsidization — is not occurring or not likely to recur, with respect to the products subject to the order.<sup>182</sup>

The ITC in December 2006 concluded five-year reviews of AD/CVD duties currently in place on flat products imported from 16 countries, including the two NAFTA partners, Brazil, Japan, Korea and all the major western European steel producers. There were two groups of carbon steel “flat” products involved: corrosion-resistant steel (widely used in the automotive industry) and “cut-to-length” plate. The ITC decided in December 2006 that in most of the cases injury to

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<sup>179</sup> President George W. Bush. Memorandum on “Presidential Determination on Imports of Circular Welded Non-Alloy Steel Pipe from the People’s Republic of China” (Pres. Determination no. 2006-7), December 30, 2005.

<sup>180</sup> *AMM*, “The Pressure Is Building in Pipe and Tube” (June 5, 2006 print ed.), pp. 4-5.

<sup>181</sup> *Ibid.*, “President Says No to ‘421’ Help vs. China Pipe” (January 2, 2006), p. 1; “China Sees Rejection of ‘421’ Plea Forging Ties” (January 4, 2006), p. 6; “The Oval Office Bats 4-0 on China Trade, But Critics See Only the Zero” (January 9, 2006), p. 9.

<sup>182</sup> Sunset reviews of AD/CVD orders are discussed in CRS Report RL32371.

domestic steel producers was not continuing nor foreseeably likely to recur and the AD/CVD orders were revoked.<sup>183</sup>

The ITC held hearings on the two sets of products on October 17, 2006 (for corrosion-resistant steel) and on October 19, 2006 (for steel plate). Top executive officers of the major steel companies testified that, although the industry had recovered significantly in terms of profitability, much of the price increase recorded since the termination of broad safeguards in 2003 was driven by higher costs of inputs, as this CRS report has detailed above. They averred that elimination of the remedy duties could lead to a flood of imports in the future, particularly if the Chinese market's growth slowed and subject countries redirected product to the U.S. market. USWA President Leo Gerard argued in addition that current high steel prices were needed to support contributions negotiated by the union to health care for retirees by successor companies to steel mills that had gone bankrupt. Members of Congress also testified at both hearings, mostly in favor of retaining the remedy tariffs.

Representatives of the six largest companies producing motor vehicles in the United States countered the steel companies' testimony. The companies testifying were the so-called "Detroit Three," (General Motors, Ford and DaimlerChrysler) and the three leading Japanese-owned producers (Toyota, Honda and Nissan). They argued that, after up to 15 years, it was time to sunset these remedy tariffs, especially in view of the current profitability of the steel industry.

In its determination, the ITC in a 4-2 vote generally agreed with the automotive companies. The majority maintained in part that in a "just-in-time" motor vehicle manufacturing environment, long steel supply lines were a questionable economic practice, and, therefore, a threat of massive imports was unlikely to recur. In the Canadian case, the majority felt that given the high level of integration within the auto industry on both sides of the border and the existence of long-term supply contracts, a big increase in imports from that source was also unlikely. In all but two cases, the tariffs were lifted. However, the majority kept the remedy duties in place on imports from Korea and Germany, because the major companies in question, Posco (Korea) and ThyssenKrupp (Germany) maintained no U.S. domestic steelmaking operations, had continued to import, and would be likely to increase imports substantially, if duties were lifted. The two commissioners who voted to retain the remedy duties said that all subject imports should be cumulated. They felt, therefore, that revoking duties on some corrosion-resistant steel imports would encourage shifts in the world market and a general rise in U.S. imports of the subject products, to the detriment of domestic producers.

There was no such split on the ITC regarding cut-to-length plate imports. By a unanimous vote, the ITC revoked these tariffs. In view of the continuing high prices of steel plate, the ITC did not accept the producers' argument that a new increase in plate imports was foreseeably likely. The ITC did not believe that in either case elimination of the tariffs would undermine domestic industry pricing.

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<sup>183</sup> Revocation in accordance with U.S.C. 19 § 1675(d)(2).

**Table 2**, as published in *American Metal Market*, indicates the level of penalty tariffs that were removed by the ITC's decisions of December 2006.<sup>184</sup>

## ITC Broadly Upholds Steel AD/CVD Tariffs in 2007

The ITC made a number of other important sunset case decisions in 2007. In their first decision, they revoked duties on major energy industry products. But in other cases, they generally upheld existing AD/CVD orders.

- **Oil country tubular goods (OCTG) from Argentina, Italy, Japan, Korea and Mexico.** OCTG products are used in drilling operations by the oil and gas industry. Similar to corrosion-resistant steel, this case saw domestic steel producers confront the larger energy industry and foreign steel suppliers. **On May 31, 2007, the ITC revoked all subject duties by a 4-2 vote.**<sup>185</sup> According to a press report, "... Attorneys for foreign [steel producers] pointed to the profitability of the U.S. steel industry as proof that it no longer deserved government protection." The duties removed ranged from less than 2% on products from Mexico, Italy, and South Korea, to 44% on products from Japan, and more than 60% on those from Argentina.<sup>186</sup>
- **Reinforcing Bar from Belarus, China, Indonesia, Latvia, Moldova, Poland, South Korea and Ukraine.** This is generally a lower-cost product widely used in the construction industry, with the respondents mainly countries from eastern Europe, but notably including China. **The ITC decided on July 10, 2007, that, owing to a continued threat of injury to U.S. domestic producers, the**

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<sup>184</sup> USITC. *Certain Carbon Steel Products from Australia, Belgium, ... et al.*, Vol. 1: *Determination and Views of the Commission* (Publ. 3899, January 2007). Pp. 3-13 summarize the Commissioners' votes and decisions. For reactions to the decision, see "Six largest Automotive Companies Applaud U.S. International Trade Commission Decision to Revoke Steel Duties on Four Countries," (press release jointly released, December 14, 2006); USWA. "USW Decries Trade Commission Decision Revoking Orders on Unfairly Traded Steel Imports" (press release, December 14, 2006); *Detroit News*, "Carmakers Win Trade Battle" (December 15, 2006); *Automotive News*, "Suppliers Laud Removal of Steel Tariffs" (December 25, 2006), p. 37; and, *AMM*, "US Steel's Loss at the ITC a Sign of Things to Come?" (December 18, 2006 print ed.). A German group indicated that it might appeal the ITC decision maintaining the tariffs on subject German imports before the U.S. Court of International Trade; *AMM*, "Germans to Challenge ITC Ruling on Imports" (December 22, 2006).

<sup>185</sup> USITC. "ITC Makes Determinations in Five-Year (Sunset) Reviews Concerning Oil Country Tubular Goods from Argentina, Italy, Japan, Korea and Mexico," news release 07-059 (May 31, 2007). Four commissioners voted to revoke all the AD orders. A fifth voted to retain duties on products from Japan and Korea, while agreeing with his colleagues to revoke the other orders.

<sup>186</sup> *AMM*, "Double Whammy for OCTG as Duties Nixed, Prices Dip: Vote by ITC Revokes Margins vs. 5 Nations" (June 1, 2007), pp. 1 and 6.

**duties should be maintained, except in the case of Korea.** The ITC vote varied for different countries. It was unanimous on keeping duties, now 132%, for imports of Chinese rebar, and 60% to 70% on imports from Indonesia. The voting in other cases was mixed, and the ITC was evenly split on Latvia and Poland, meaning that the duties stay. The vote on Korea was 4-2 against a finding of continued injury.<sup>187</sup>

- **Welded Large Diameter Line Pipe from Japan and Mexico.** Large diameter line pipe is important in view of recent concerns regarding natural gas supply and prices, especially because of congressional actions to enhance transportation of natural gas from Alaska to the lower 48 states.<sup>188</sup> **On October 2, 2007, the ITC voted 4-2 to maintain the existing AD order on line pipe imports from Japan, and by 5-1 to end the duties on imports from Mexico.** An attorney for petitioners viewed the result as positive, as Japan is a much larger producer, and the AD penalty tariff is 108% on its three largest respondents. The Mexican duty was much less, at 20%.<sup>189</sup>
- **Hot-Rolled Carbon Steel Flat Products from Argentina, China, India, Indonesia, Kazakhstan, Netherlands, Romania, South Africa, Taiwan, Thailand and Ukraine.** This was the broadest range of products under review. Hot-rolled steel is the first stage of finished steel that is used to make a wide range of downstream steel products and the orders in place covered products from ten countries. **On October 10, 2007, the ITC issued a mixed decision. It maintained existing orders in place on China, India, Indonesia, Taiwan, Thailand and Ukraine. Orders on the remaining countries (Argentina, Kazakhstan, Romania and South Africa) were revoked.**<sup>190</sup>

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<sup>187</sup> USITC. “ITC Makes Determinations in Five-Year (Sunset) Reviews Concerning Steel Concrete Reinforcing Bar from Belarus, China, Indonesia, Korea, Latvia, Moldova, Poland, and Ukraine,” news release 07-070 (July 10, 2007); *AMM*, “ITC Upholds Rebar Import Duties on Seven Countries” (July 11, 2007).

<sup>188</sup> The Alaska project is discussed in detail in CRS Report RL33716, *Alaska Natural Gas Pipelines: Interaction of the Natural Gas and Steel Markets*, by Robert Pirog and Stephen Cooney.

<sup>189</sup> USITC. “ITC Makes Determinations in Five-Year (Sunset) Reviews Concerning Welded Large Diameter Pipe from Japan and Mexico,” news release 07-101 (October 2, 2007); *AMM*, “ITC Sticks with Weld Line Pipe Duty vs. Japan” (October 3, 2007).

<sup>190</sup> USITC. “ITC Makes Determinations in Five-Year (Sunset) Reviews Concerning Hot-Rolled Steel Products from Argentina, China [...]” news release 07-106 (October 10, 2007).

## WTO Decision on “Zeroing” and Proposed U.S. Trade Law Changes

On April 18, 2006, the WTO Appellate Body ruled that the “zeroing” methodology used by the Commerce Department in calculating dumping margins in many steel cases violates WTO rules. “Zeroing” is a mathematical technique applied to imported products being investigated in original AD cases, annual administrative reviews, and five-year sunset cases. In calculating AD duties, which by WTO rules must be no more than the actual dumping margin, U.S. practice has been to ignore sales where no dumping is found (i.e., to apply a zero margin). The Appellate Body found that this results in a higher applied duty, because no credit is given for subject imports priced above fair market value in a comparison of like products. The Appellate Body’s interpretation was that the WTO antidumping agreement requires that full weight must be given to “negative dumping margins.” The April 2006 decision, in a case brought against the United States by the EU, applied this principle for the first time to administrative reviews and found that zeroing is not allowed in original AD investigations, either.<sup>191</sup> Subsequently, in January 2007, in a case brought by Japan, also involving steel products, the Appellate Body found even more broadly against the use of zeroing in AD proceedings.<sup>192</sup>

U.S. courts have ruled that zeroing is allowed but not required by U.S. antidumping law. In a letter submitted by U.S. Steel on a proposal by Commerce to alter margin calculations in response to WTO rulings, the company’s legal representatives argued that additional provisions of U.S. statutory law other than those considered by the courts effectively require the application of zeroing without applying offsets for non-dumped products. As demonstrated in the letter, elimination of zeroing would generally and systematically reduce AD margins.<sup>193</sup> But the Commerce Department felt that it had to end zeroing in certain types of calculations, to comply with the WTO ruling. It also requested comments on proposed alternative methods. The EU considers some aspects of U.S. policy still not in compliance. It has brought a new case in the WTO regarding additional annual administrative and sunset reviews involving steel products.<sup>194</sup> In response, Deputy USTR Peter Allgeier reportedly stated, with respect to consideration of AD rules at a meeting of the WTO Doha Development Round that the U.S. government “cannot envisage an outcome to the negotiations without addressing zeroing.”<sup>195</sup>

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<sup>191</sup> *Inside US Trade*, “Appellate Body Rules Against Zeroing in Administrative Reviews” (April 21, 2006). For the EU reaction see European Commission, “EU Welcomes WTO Ruling on US Anti-Dumping Violations,” press release (April 18, 2006).

<sup>192</sup> *DER*, “U.S. Zeroing Methodology Hit Again by WTO Appellate Body” (January 10, 2007), p. A-25.

<sup>193</sup> Letter of John J. Mangan *et al.* on behalf of U.S. Steel Corp. to Assistant Secretary of Commerce David Spooner (April 5, 2006).

<sup>194</sup> The WTO cases and the U.S. response are analyzed in CRS Report RL32014, *WTO Dispute Settlement: Status of U.S. Compliance in Pending Cases*, by Jeanne J. Grimmett. See esp. the discussion relating to WTO cases DS294, DS322, and DS 350.

<sup>195</sup> As reported in *DER*, “U.S. Sets WTO Approval of ‘Zeroing’ as Condition of Agreement (continued...)”

Some Members of Congress have indicated dissatisfaction with the impact of evolving pattern of WTO discipline on U.S. trade law, including zeroing.<sup>196</sup> Senator Rockefeller, in Title I of S. 364, discussed above, would require congressional approval of “all measures taken by the U.S. government to comply with adverse [WTO] decisions.” He added, “This provision of my trade bill would prevent the Administration from side-stepping Congress in determining how to respond to an adverse decision in the WTO.”<sup>197</sup> In S. 1919, Senator Baucus did not go as far, requiring only a deferral of any changes in regulations until after Congress had received a report from a commission that his legislation would establish (Sec. 206).<sup>198</sup>

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<sup>195</sup> (...continued)  
to Doha Deal” (July 12, 2007), p. A-2.

<sup>196</sup> See *Inside US Trade*, “Democratic Power Play Yields 2<sup>nd</sup> Zeroing Delay” (January 25, 2007).

<sup>197</sup> *Congressional Record* (January 23, 2007), S915.

<sup>198</sup> *Ibid.* (August 1, 2007), S10610.