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Steel: Price and Policy Issues

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Stephen Cooney
Industry Analyst
Resources, Science, and Industry Division

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Summary

Steel prices remain at historically elevated levels. The rapid growth of steel production and demand in China is widely considered as a major cause of the increases in both steel prices and the prices of steelmaking inputs. Steel companies have achieved much greater pricing power, in part through an ongoing consolidation of the industry. Most of the integrated side of the industry, nearly half of U.S. production, is controlled by just two companies: U.S. Steel, the traditional industry leader, and Mittal Steel, itself the result of multiple international mergers. Moreover, Mittal's 2006 acquisition of the global number-two producer, Arcelor, may further shake up the industry. Nucor and Gerdau have been active major consolidators of U.S. minimill production.

U.S. steel production in 2005 was 104.6 million tons, a 5% decline from the high level of 2004. The net decline in output was mainly on the integrated side of the industry, which has continuously lost share. Imports also fell from the high level of 2004, although they have increased strongly in early 2006. Input prices, especially ferrous scrap and iron ore, remain high and have contributed to higher production costs, which have been largely passed along to industrial consumers.

The growth of China contributed to a large increase in demand for both steel and steelmaking inputs. China has become both the world's largest steelmaker and steel consumer. By late 2005, it became a net exporter of steel, including an increase of exports to the U.S. market. The House has passed H.R. 3283, which would require the Commerce Department to consider petitions to establish countervailing duties against subsidized imports from China. The Senate agreed to the provisions of S. 295, a bill to force China to revalue its currency or face a 27.5% tariff on its exports to the United States, but action on this measure has been postponed. The Bush Administration initiated a U.S.-China Steel Dialogue in March 2006, and the U.S., Canada and Mexico have asked China whether its 2005 Steel Policy calls into question some of its WTO commitments.

Some policy developments in 2005-06 may affect domestic steel producers. The Organization for Economic Cooperation and Development abandoned the effort to achieve an international agreement to ban subsidies for steel mills. The federal deficit reduction law (P.L. 109-171) included a repeal of the Continued Dumping and Subsidy Offset Act ("Byrd Amendment"), under which domestic steel producers have received distributions of trade remedy duties. In December 2005 the U.S. International Trade Commission terminated an antidumping case brought by domestic steel companies against steel wire rod imports. Also in December, President Bush decided in a special trade safeguard case not to provide trade relief for domestic producers of steel pipe against imports from China. 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. In the 109th Congress, 2nd Session, H.R. 5043 and H.R. 5529 were introduced, which would establish some changes sought by the steel industry in U.S. trade law, as well as a commission to review WTO decisions adverse to U.S. interests. This report will be updated as warranted by developments.

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Steel: Price and Availability Issues

Introduction

Many American businesses are concerned by a long-term increase in the price of steel. Their problems have resonated with some Members of Congress, especially those who were previously 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. The problem of steel prices for consuming industries has been exacerbated by a strengthening of the U.S. economic recovery and global economic growth, which increased demand for steel.

In 2005, however, 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. The growth of China had also contributed to a large increase in demand for both steel and steelmaking inputs. China has become both the world's largest steelmaker and steel consumer. By late 2005, China also became a net exporter of steel, including an increase of exports to the U.S. market.

Moreover, in 2005-06 a number of policy decisions were taken that may adversely affect the interests of domestic steel producers:

- The Organization for Economic Cooperation and Development (OECD) has abandoned its efforts to negotiate an agreement among all major steel-producing countries to ban domestic subsidies for steel mills;

- Both houses of Congress approved a federal deficit reduction bill that included a prospective repeal of the Continued Dumping and Subsidy Offset Act ("Byrd Amendment"), under which many domestic steel producers have received distributions of antidumping and countervailing duties charged on imports;

- The U.S. International Trade Commission (ITC) decided 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 is violative of WTO rules, when used in administrative reviews. The decision at the very least may lead the Commerce Department to lower dumping margins or, in some cases, to reverse dumping rulings altogether.

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.

U.S. domestic steel production for 2005 was 104.6 million tons, a 5% decline from the 2004 level of 110 million tons. Capacity utilization declined from 94.6% in 2004 to 87.5% in 2005.[1] Imports were also down by about 10% in 2005. In part, lower demand in the U.S. market may have been due to steel purchasers running up inventory levels in 2004, in the face of fears about steel shortages. Also, General Motors and Ford, the two leading consumers of steel for automotive applications, reported significant production declines in 2005. By midyear 2006, output had risen to about two million tons higher than in 2005 on an annual basis, and capacity utilization to a range of 87-88%.[2]

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.[3] The production of the large integrated mills using basic oxygen furnace (BOF) technology (the last U.S.

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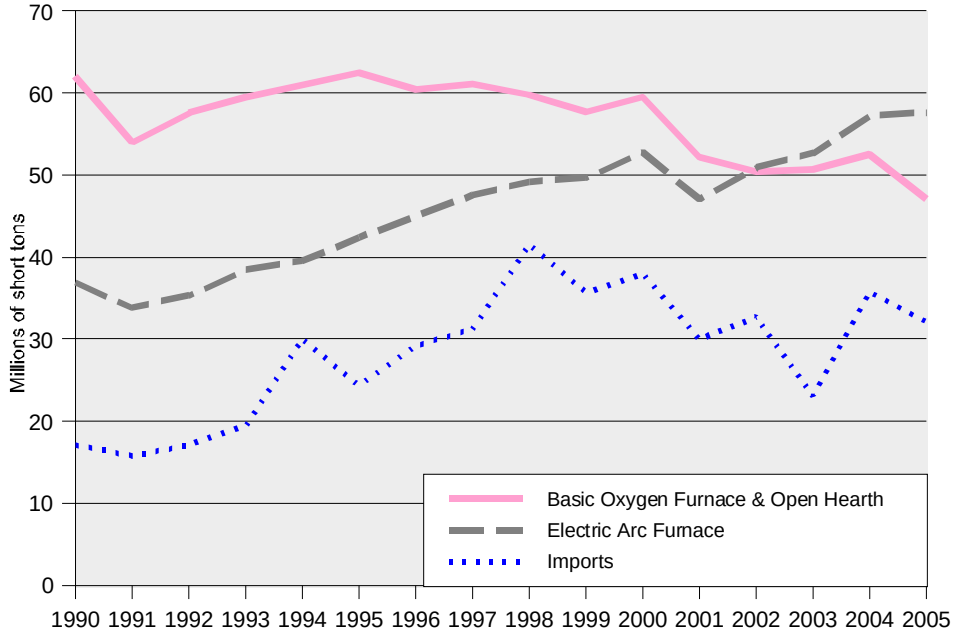
[1] American Iron and Steel Institute (AISI). *Annual Statistical Report*, 2005. All tonnage figures in this CRS report are "short tons" (2,000 lbs.), as commonly used in the U.S. steel industry, unless otherwise indicated.

[2] *American Metal Market* (*AMM*), May 25, 2006, p. 7.

[3] 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*.

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 declined to 47.1 million tons, the lowest level from this type of furnace since 1982. Integrated mills remain the sole source of certain high-volume products, such as external sheet for automobiles.

Figure 1. Sources of U.S. Steel



Source: American Iron & Steel Institute. *Annual Statistical Reports* 2005.

Minimills employ electric-arc furnaces (EAFs), a newer technology. They have overtaken integrated mills as the leading source of steel by tonnage, 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.[4]

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 though it was almost flat in 2005 at 57.5 million tons. The minimill share of domestic production in 2005 rose to 55%.

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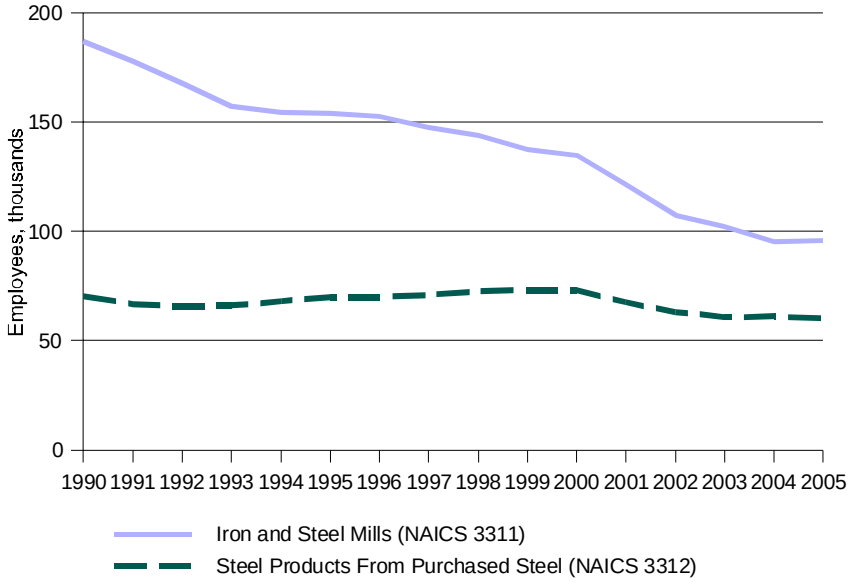
[4] The best-known business model in the minimill industry, that of Nucor Inc., the largest EAF producer, is described in detail in *Business Week*, "The Art of Motivation" (May 1, 2006), pp. 57-62.

Imports increased in 2004, then fell in 2005. **Figure 1** shows that imports 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, but during the application of safeguard tariffs 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. As domestic market demand cooled, imports in 2005 fell back to 32 million tons.

Figure 2. Employment in U.S. Steel Industry



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

The recovery of the steel industry is also reflected in steel mill employment levels, 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 marks the first time since 1990 that employment in the industry did not decrease (**Figure 2**). It grew marginally from 95,400 to 95,800, despite continued progress in both the minimill and integrated sectors in reducing the worker-hours required to produce a ton of steel.[5] 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.

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. By 1995, the employment level regained the level of 70,000 seen in 1990, and by 2000 it had increased to more than

[5] Working hours per ton of steel produced have decreased from more than 16 in 1956 to about 4 in 1990, more than 2.0 in 2000, and less than 2.0 in 2005. AISI, *Annual Statistical Report* 2005, chart in executive summary.

73,000. The recession of 2001 followed by the increased price of raw steel after late 2003 saw the 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.[6] To a great extent, that restructuring has been achieved. There are now only two dominant players among integrated steel mill companies in the United States, and two market leaders among the minimill producers. The major players in U.S. steel production are also the leaders in North America. Moreover, the leading North American and global producer, Mittal Steel, in June 2006 reached a deal to acquire a controlling interest in the global number-two producer, Arcelor.[7] 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.

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 as of 2005, then all of the other top producers in North America, whether they are domestic- or foreign-owned.

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

[7] Both companies are headquartered in western Europe, although Mittal Steel's production assets are widely distributed around the world, including Indonesia, Kazakhstan, South Africa, Poland, Ukraine, South Africa, Mexico and the United States. Arcelor is itself the result of consolidation of two French-owned steel companies, the Luxembourg steel company and a Spanish steel company. Arcelor's global assets include control of CST of Brazil, the world's largest merchant exporter of semi-finished slab steel. It has no U.S. production assets, though it acquired the leading Canadian producer, Dofasco, in January 2006 and earlier was reported to be interested in acquiring Bethlehem Steel. On developments in the Mittal bid for Arcelor, reference may be made to the following sources: Bloomberg.com, "Mittal Makes $22.7 Bln. Unsolicited Bid for Arcelor" (Jan. 27, 2006); *Wall St. Journal*, "Arcelor Transfers Dofasco Unit to Block Takeover" (Apr. 5, 2006), p. A3; *FT.com*, "Governance May Impede Mittal's Pursuit of Arcelor," and "Mittal Steel Directors Have Links to Founder" (Apr. 27, 2006); *Wall St. Journal*, "Arcelor Assails Mittal's Structure" (May 4, 2006), p. C4; Bloomberg.com, "Arcelor Starts Suit Against Mittal on Car Steel" (May 11, 2006); *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" (Jun. 26, 2006), p. A3; and, *Chicago Tribune*, "Steelmakers Forge Merger Deal" (Jun. 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" (Feb. 4-10, 2006), pp. 55-56.

Table 1. Top Global and North American Steel Producers

	2005 Global Rank	HQ Country	Makes Steel in N.Am.?	Output (millions of metric tons)	
				2005	2004
Mittal Steel	1	Neth.	Y	*62.98	42.84
Arcelor	2	Lux.	N	46.65	46.90
Nippon Steel	3	Japan	N	32.91	31.41
POSCO	4	Korea	N	31.42	31.05
JFE Steel	5	Japan	Y	29.57	31.13
Shanghai Baosteel	6	China	N	22.73	21.41
U.S. Steel	7	USA	Y	19.26	20.83
Nucor	8	USA	Y	18.45	17.91
Corus Group	9	UK	N	18.18	18.60
Riva	10	Italy	N	17.53	16.70
ThyssenKrupp	11	Germany	N**	16.55	17.58
OAO Severstal	12	Russia	Y	15.16	12.80
Evraz Holding Group	13	Russia	N	13.85	12.23
Gerdau	14	Brazil	Y	13.70	13.40
Sumitomo	15	Japan	N	13.48	12.33
Wuhan Iron & Steel Group	16	China	N	13.05	9.31
Steel Authority of India Ltd.	17	India	N	12.22	12.14
Anshan Iron & Steel	18	China	N	11.90	11.33
China Steel Corp.	19	Taiwan	N	11.65	12.17
Techint Group	20	Argentina	Y	11.42	8.93
BlueScope Steel	39	Australia	Y	6.78	6.60
AK Steel	48	USA	Y	5.63	5.60
Stelco	56	Canada	Y	4.54	4.91
Dofasco	60	Canada	Y	4.19	4.99
Steel Dynamics	76	USA	Y	3.28	3.15
Altos Hornos de Mexico	78	Mexico	Y	3.24	3.01
Ipsco	82	USA	Y	3.05	2.98
Vallourec	89	France	Y	2.77	2.75
Commercial Metals Co.	92	USA	Y	2.69	2.90
Algoma Steel	100	Canada	Y	2.34	2.30
Wheeling-Pittsburgh Steel	102	USA	Y	2.27	2.18
Acerinox	105	Spain	Y	2.24	2.30

*Includes total 2005 production of all companies acquired by yearend.
**Produces stainless steel at operation in Mexico.
Source: *American Metal Market* (Mar. 27, 2006 print ed.)

At the top of the table is Mittal Steel, a newly formed international company that became in 2005 the largest single steel producer in the United States (about 22 million tons), North America (about 29 million tons), and the world (approximately 70 million short tons). 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 will own

43% of a combined company whose unite produced more than 100 million MT of steel worldwide in 2005.[8]

Among Mittal's earlier acquisitions was a U.S. integrated steel mill, Inland Steel. He had also independently 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, and one of the three largest overall. He acquired another venerable, but bankrupt, producer, Bethlehem Steel, in 2003. In 2004, ISG also 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.[9]

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.[10]

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[8] *Wall St. Journal*, "Arcelor Agrees to ... Mittal" (Jun. 26, 2006).

[9] 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*.

[10] Ispat International N.V., Ispat International to Acquire LNM Holdings to Form Mittal (continued...)

Only two other companies with major operations in the United States are among the top ten 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 just under 20 million metric tons worldwide in 2005.

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.[11] 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. These two mills give U.S. Steel about six million tons of capacity in Europe.

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. 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 short tons of steel in 2005. 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.[12]

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

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

[12] 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" (Feb. 7, 2005 print ed.), pp. 10-11

The second-largest minimill operator in North America is Gerdau, a company based in Brazil. While producing 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 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 the Cargill Inc. group, which was seeking to exit the steelmaking business.[13]

Thus, 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, and are companies based outside North America. This is an historic change for a domestic industry that had been almost exclusively North American-based.[14]

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 has been a major issue in 2006.[15]

The smaller integrated steel mills are disappearing 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. Severstal is also the primary financial source and controlling owner of a new minimill in eastern Mississippi, designed to supply steel to automotive assembly plants in the Deep South.[16]

Severstal, whose CEO Alexei Mordashov was seeking to expand his assets outside of Russia, subsequently rose to the number 12 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, Mordashov agreed in May 2006 to merge his

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[13] *AMM*, Sept. 10 and Nov. 3, 2004.

[14] 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.

[15] 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" (Mar. 13, 2006, print ed.), p. 12.

[16] The effort was organized and led by John Correnti, formerly head of Birmingham Steel; *AMM*, "SeverCorr Rising" (Dec. 5, 2005 print ed.), pp. 4-5; and, May 30, 2006.

company with Arcelor, which would make 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 Mittal's merger with Arcelor may render the deal with Mordashov moot.

Meanwhile, after steel prices fell in 2005, Mittal Steel decided to end steelmaking operations at Weirton (and therefore in the state of West Virginia), though tin-coating operations are continuing.[17]

The remaining U.S. independent integrated mills are:

- *AK Steel* (no. 48 on the global list), a widely diversified steel product manufacturer with integrated steel operations.
- *Wheeling-Pittsburgh* (no. 102) had been bankrupt, but used an Emergency Steel Loan Guarantee to secure financing to build a new minimill, and also become an operator of both technologies.[18] Losing money again, despite a steel market that has remained strong and relatively stable, Wheeling-Pitt has been the subject of reports that it might be acquired by the Brazilian steel company, CSN. CSN owns a rolling mill in Indiana, and might be able to use Wheeling-Pitt's integrated mill in Steubenville, Ohio as a source for semi-finished slab.[19]
- *WCI Steel* of Warren, Ohio (not on list) reorganized out of bankruptcy in May 2006.

Steel Dynamics, Ipsco and Commercial Metals (CMC), all on the bottom quarter of the global list, are successful, U.S.-based minimill operators (though Ipsco's origins are in western Canada, and it maintains operations in both countries). Two other foreign-owned companies with significant U.S. steelmaking operations are in the table. Vallourec (no. 89) is the French-based parent of V&M, a tube-making specialist that operates a minimill in Youngstown, Ohio. Acerinox of Spain is only listed 105th 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.

There are three Canadian companies listed, Dofasco, Stelco and Algoma, and just one from Mexico. One of the two largest and the most profitable, Dofasco, in January 2006 was the target of a takeover battle primarily between two large European-based companies, Arcelor and Thyssen-Krupp.[20] 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 Thyssen-Krupp, if it acquired Arcelor. It remains to be seen if this this transaction will be completed after the Arcelor-Mittal

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[17] *AMM*, Dec. 15, 2005 and Jan. 2, 2006

[18] *Ibid.*, Aug. 4 and Sept. 10, 2003; Mar. 8, 2004 print ed.

[19] *Ibid.*, Apr. 17, and May 9, 11, and 12, 2006.

[20] For example, see *ibid.*, Jan. 4 and 10, 2006.

merger.[21] Stelco, in 2005 Canada's largest producer, reorganized in 2006 after two years in bankruptcy protection.[22] Altos Hornos de Mexico S.A. (no. 78) is also an integrated steel mill company, and virtually the last independently owned large Mexican steel mill. 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.[23]

Another structural change in the industry, which may especially affect labor-management relations in the integrated side of the U.S. steel industry, is 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.[24]

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 Indepenedent 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. The company has stated that the expired contract was outdated by the new contracts negotiated at the other integrated mills, discussed above, and has been operating the mill with salaried and temporary workers. Labor-management issues have been further complicated by an AEIF negotiating proposal for its members to be covered under a mulitemployer health benefits plan operated by a third union, the International Association of Machinists (IAM). The USWA represents other AK operations, has tried to organize Middletown, and reportedly opposes Middletown workers becoming affiliated with the IAM instead. The representation issue may be resolved by an election organized under the auspices of the National labor Relations Board[25]

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[21] See *Wall St. Journal*, "Arcelor Transfers Dofasco ..." (Apr. 5, 2006); and, *AMM*, (May 30, 2006).

[22] On the Canadian steel industry in an era of global consolidation, see, *ibid.* "A Season of Change for Canadian Steel" (Dec. 19, 2005 print ed.), pp. 4-5. On Stelco's emergence from bankruptcy, *ibid.*, "Mott Paying $4.7 Million for 1M Shares in Stelco" (Apr. 4, 2006).

[23] *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" (Jun. 14, 2006).

[24] *Ibid.*, "Executive Boards of USW, PACE Union Vote to Merge" (Jan. 12, 2005), p. 1.

[25] The development of the dispute is described in detail in *ibid.*, "90 Days and Counting" (continued...)

The other company affected by labor-management concerns is Gerdau. 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, but operations have continued without a new replacement contract.[26]

World Steel Output Totals

At the global level, steel output grew by more than 60 million MT in 2005, but **all the net increase was accounted for by the People's Republic of China**. Chinese steel output grew 26% or more than 71 million MT in 2005. China in 2005 produced more than 30% of all the world's steel (total global output was 1.105 billion MT). Developments in China and its steel policies will be discussed in more detail below. No other major national producers saw significant increases over 2004, and most, like the United States and the rest of North America, registered small declines in output.

The **European Union** (EU) as a whole and **Japan** both produce more steel than the United States. The EU's western European members (15 countries) in 2005 produced just under 15% of global steel production. The leading producer was Germany (44 milllion MT), followed by Italy (29 million MT), France (19 million MT) and Spain (17 million MT). The ten new EU members were not included in the EU totals in the source, but none produced more than 10 million MT.

Japan's total production of more than 112 million MT in 2005 compares with 93 million MT for the **U.S. total**, and these two countries are numbers two and three globally, behind China. Japan's global share was 10% and the U.S. share was 8.4%. However, **Canada** and **Mexico** each produce in the 15-16 million MT range annually, so the the **total North American output** of 126 million MT is more than 11% of the global total.

The former Soviet Union was once a leading producer, and ahead of the United States. In 2005, the production of **Russia** was 66 million MT (just under 6% of world production), and **Ukraine** was 39 million MT (3.5%). 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

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[25] (...continued)
(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?" (Jun. 16, 2006); and, "AK Won't Recognize IAM Representation" (Jun. 21, 2006).

[26] 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.

South Korea, **India**, **Brazil**, **Turkey**, and **Taiwan**, all in a 20-50 million MT annual range.[27]

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. It has declined since then, but has stayed at a much higher level than it was before the initial presidential safeguard action of 2002.[28]

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. Note that large industrial users, such as the "Big Three" automotive producers, generally negotiate longer-term contract prices, which may be significantly lower.[29] Thus, the steel users most adversely affected by high steel prices were small and medium-sized companies that bought steel on the spot market.[30] By the latter part of 2005, the domestic price for hot-rolled coils, a benchmark product, had retreated to less than $500 per ton, still about double the lowest prices after 2000. By mid-2006, however, the price had moved back up to nearly $640.[31]

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[27] International Iron and Steel Institute data presented in Global Insight. *Steel Monthly Report* (Mar. 2006), tab. 2.

[28] Global Insight. *Steel Monthly Report* (Dec. 2004), pp. 1-2.

[29] This system is described in Al Wrigley, "Car Talk: Wheeling and Dealing Steel in Detroit," *AMM*, Dec.23, 2002 print ed., p. 3. It is also summarized in Brian C. Becker and Kevin Hassett, *The Steel Industry: An Automotive Supplier Perspective* (Feb. 2005, funded by the Motor & Equipment Manufacturers Assn.), p. 13.

[30] See U.S. House. Committee on Small Business. *Spike in Metal Prices — What Does it Mean for Small Manufacturers?* Hearings, Mar. 10 and 25, 2004.

[31] 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 Sept. 2004 peak price, *AMM*, "'Let's Take It Slow ...'" (May 9, 2005). Later data are from *Global*

(continued...)

Steel prices remain cyclical, reflecting overall economic trends and specific developments in consuming industries, such as the declining demand and production of large sports utility vehicles. But it may be also apparent that consolidation of ownership of the North American steel industry has increased its ability to adjust supply to demand, and thereby reduce price downswings. As John Anton, the steel analyst for Global Insight, an economics consultancy, wrote in 2005, in commenting on price fluctuations, "Consolidation allowed mills to cut production proactively. If production had not fallen as soon as it had, these surpluses would have been more extreme, and prices could have truly crashed."[32] Later he noted, "The willingness of North American producers to cut production in defense of price will allow the retention of a partial premium." As of mid-2006, U.S. hot-rolled coil prices were about one-third above levels in other world markets.[33]

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 generally the major input in 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 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%), historically because it enables them 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. 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 calculated by *American Metal Market*. The price reached a plateau of about $100/T from mid-2002 through mid-2003. Then the price rise accelerated to $160/T by the end of 2003, and climbed more steeply to an average of more than $237/T by early March 2004. More premium grades commanded higher prices, up to reports of more than $300/T. At

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[31] (...continued)
Insight Steel Outlook, presented to Steel Manufacturers Assn. (May 2006). The pattern of generally falling prices did not apply in 2005 to stainless steel; see Global Insight, *Steel Industry Review* (3rd Qtr. 2005), pp. 39-40; and, *Steel Monthly Review* (Feb. 2006), pp. 1-2.

[32] Global Insight. *Steel Industry Review* (3rd Qtr. 2005), p. 1.

[33] Quote from Anton in Global Insight, *Steel Monthly Report* (Mar. 2006), p. 2; comparative price data from Global Insight SMA presentation.

three different times during 2004 (March, August and November), the price of this benchmark category of scrap peaked near or above $250/T. By early 2005, the price abated to around $200, but at three different subsequent periods during that year the price of scrap again peaked at more than $220/T. By mid-2006, the price was again higher than $245/T.[34]

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.[35] Concern that rising metal scrap exports were driving up domestic prices and aiding foreign competitors to U.S. metals-consuming industries led to an unsuccessful petition to restrict non-ferrous metal exports and to lead steel users to also consider such a request.[36] No petition was ever filed, however, for short supply controls on steel scrap exports, nor was any legislation introduced to restrict such exports. Subsequent data indicate that U.S. ferrous scrap exports were 11.7 million MT in 2004 and 12.4 million MT in 2005. China, taking just under 30% of the total, is still the leading destination, but Korea in 2005 ranked behind Canada, Mexico, and Turkey.[37]

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. U.S. negotiators have 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).[38] Ukraine had already passed

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[34] See charts in *AMM*, Feb. 7 and May 9, 2005 print eds., both on p. 15; Jan. 9, 2006 print ed., p. 11; and, June 5, 2006 print ed., p. 14.

[35] House Small Business Comm. Hearing (March 10, 2004). Statement of Robert J. Stevens (Impact Forge Inc. and President, Emergency Steel Scrap Coalition).

[36] On export controls on both ferrous and non-ferrous scrap, see *AMM*, "Short Supplies, Export Angst" (Feb. 23, 2004 print ed.), p. 2; "Scrap Wars Create Turmoil, Skepticism" (Mar. 3, 2004); and, "Commerce Nixes Copper's Plea to Cap Scrap Exports" (Jul. 22, 2004), p. 1; also, *Washington Trade Daily*, "Limiting Copper Scrap Exports" (Apr. 8-9, 2004).

[37] *AMM*, "U.S. Scrap Exports a Two-Sided Affair" (Feb. 15, 2006), incl. table.

[38] 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

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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 may be made pending negotiations with other WTO members.[39] Russia has also agreed to discuss its export taxes and restrictions on scrap exports as part of its WTO accession negotiations. Many other nations also have restrictive laws on the books regarding scrap exports, and these are generally being addressed in trade negotiations by the U.S. Trade Representative.[40]

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.[41] 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.[42]

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[38] (...continued)
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" (Mar. 27, 2006 print ed.), p. 2.

[39] *Ibid.*, "Ukraine OK of Export Duty Cut Stokes Fears of Scrap Shortages," (Nov. 21, 2005), p. 7; and interview of May 26, 2006, with Jean Kemp, Director of Steel Trade Policy, Office of U.S. Trade Representative.

[40] For example, Vietnam agreed to a "significant reduction in its scrap export duties" as part of its bilateral WTO accession negotiations with the United States, according to *ibid.* But other countries are establishing or strengthening such restriction; see, *AMM*, "Venezuela Bars Scrap Exports to Ensure Local Supply" (Nov. 21, 2005), p. 7.

[41] *AMM*, "CVRD Wins 71.5% Increase in Japanese Iron Ore Deal — Asian Steelmakers Gird for Domino Effect" (Feb. 23, 2005), p. 1.

[42] 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" (Jun. 21, 2006), p. D10.

Domestic iron ore production, which is in the form of taconite that is subsequently pelletized, increased in 2004-05. After averaging less than 50 million MT in 2001-03, production was 54.7 million MT in 2004 and 54.5 million MT in 2005. But that was 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 were essentially level (11.8 million MT in exports, with 13.0 million MT imported).[43]

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.[44]

The Cost and Supply of Coking Coal. 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. It remained below the latter figure in 2004-05.[45] 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.

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.[46] With the recovery in domestic steel demand, imports have had to make up the gap. They more than doubled, from 2.8 million tons in 2003 to 6.9 million in 2004, then leveled off as integrated steel production declined

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[43] Iron ore data from Dept. of the Interior. U.S. Geological Survey. *Mineral Commodity Summaries*, 2004 and 2006; and *Monthly Reports* (Jan. And Feb. 2006).

[44] *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.

[45] U.S. Dept. of Energy. Energy Information Administration (EIA). "Coke Overview, 1949-2003" (Feb.11, 2005); and, "Quarterly Coal Report" (Oct.-Dec. 2005), tab. 2.

[46] Scott Robertson, "For Some Steelmakers, a Lump of Coal Would be a Welcome Gift," *AMM* print ed. (Mar. 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. (Feb. 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.

somewhat and domestic coke sources came back on line in 2005.[47] 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.[48]

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).[49] As more Chinese coke output is being used in domestic steel production, export growth flattened.[50] 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 ton by early 2004, and that in February 2004, China was actually a net importer of coking coal versus typical net exports of one million tons per month.[51]

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.[52] 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.[53] Nevertheless, Chinese coke prices have dropped from a short-lived peak of more than $400 per metric ton in 2004, to less than $150 in late 2005. In contrast to the situation in 2003-04, "massive

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[47] EIA. "Quarterly Coal Rept." (Oct.-Dec. 2005), tab 2.

[48] 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. Sun Coke, a merchant supplier, is building a new plant in Haverhill, OH. *AMM.com*: "More Demand Attracts More Supply?" (Jul. 23, 2004); "Wheeling-Pitt Mulling Post-BF Coke Strategy" (Aug. 9, 2004), "Some Coke Batteries at 50% as Woes Continue" (Jan. 21, 2005); *AMM*, "Construction of Ohio Coke Plant May Start Soon" (Jan. 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.

[49] *AMM.com*, "Mills Face Coke Quandary as Chinese Prices Soar" (May 16, 2003).

[50] 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* (Jan. 29, 2004); also; "China Coke Exports Seen Even Lower," *Platts International Coal Report* (December 8, 2003).

[51] House Small Business Committee hearing (Mar. 10, 2004), statement of W. Atwell, p. 2.

[52] *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 (Jan. 27, 2005).

[53] *AMM*, "EU Presses China to Change Coke Export Rules" (Nov. 9, 2005), p. 4.

investment" in Chinese coke resources had created a surplus of supply over demand. U.S. prices on the same basis had also fallen below $140.[54]

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 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.[55]

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. Forecasts indicated that prices could go even lower in summer and autumn, then rise in winter 2006-07, but not higher than around $10. However, the long-term gas availability forecast was not positive, and winter prices could be significantly higher.[56]

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.

China as a Steel Producer, Consumer, and Exporter. In recent years, China became the world's largest steel producer and, at the same time, 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.

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[54] *AMM*, "A Cool Down in Coke Prices" (Nov. 7, 2005), pp. 4-5.

[55] Gas price statistics from Global Insight, *Steel Monthly Report* (Nov. 2005), tab. 1; and, *Natural Gas Weekly* (Jan. 11, 2006).

[56] Global Insight. *Steel Monthly Report* (Mar. 2006), p. 8; and *Natural Gas Monthly* (May 2006), pp. 1-2 and tab. 5.

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 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 has not exactly worked.

> 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.[57]

China has once more become a net steel exporter: 27.6 million MT of exports, against 27.1 million MT of imports in 2005, according to official sources.[58] China has also again fallen 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, what he described as a "reasonable" level given total capacity now 400 million MT or more, and that capacity would be nearly matched with domestic demand.[59] Some private sector sources have 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.[60]

China's industry remains atomized, even by comparison with an industry that remains internationally fragmented. While China produces about a third of all steel produced worldwide, **Table 1** shows there are only two Chinese companies in the top 20: Baosteel (no. 6, 22.7 million MT produced in 2005) and Anshan (no. 18, less than 12 million MT). However, six Chinese companies occupy the places from no. 22 to 27 in the full table published in *American Metal Market*, while nine of the last 15 companies, in a list of 120 ranked by production, are also from China. Many of these companies are strongly supported by provincial governments, including with subsidized loans, so that they can stay in production, because of their social importance in the regional economic structure. With a decline in growth in the demand for steel following the central government credit squeeze, virtually all the leading steel companies in China saw profitability decline by 50 to 80%; only Anshan saw a substantial gain in net income, and that was not due to continuing operations.[61]

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[57] Global Insight, *Steel Monthly Report* (Nov. 2005), p. 1. According to IISI figures cited earlier, China in 2005 actually produced *four* times as much steel as the U.S.

[58] Reported in *AMM*, "December Increase Makes China Slight Net Exporter of Steel in '05" (Jan. 13, 2006), p. 7.

[59] *Ibid*., "China's Steel Exports Will Not Explode in '06: CISA Official" (Mar. 29, 2006).

[60] *Ibid*., "Is the China Threat Overstated?" (May 8, 2006 print ed.), p. 14.

[61] *Ibid*., "The Stats Are In and China's Top Ten Mills See Profitability Dip" (May 8, 2006 print ed.), p. 14.

As domestic Chinese demand fell short of expectations, the U.S. market again saw a sharp increase in steel imports from China. By 2000, China was exporting more than one million MT of steel annually to the United States. These exports fell off, as U.S. demand declined and trade safeguards were implemented, to 582,000 MT in 2003. But Chinese imports in the United States almost tripled to more than 1.4 million MT in 2004, and increased again by a third to 1.9 million MT in 2005, according to U.S. Census Bureau steel import data. Data for early 2006 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.[62]

China's Steel Policy and the U.S.-China Steel Dialogue. In July 2005, the Chinese government released the China Iron and Steel Industry Development Policy, prepared by the National Development and Reform Commission. 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.

- 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.[63]

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 against Chinese imports for the domestic steel pipe industry

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[62] *Ibid.* "China Is Awash in Steel and Racing to Exploit a Price Advantage" (Jun. 19, 2006 print ed.), pp. 6-7.

[63] World Trade Organization. Committee on Subsidies and Countervailing Measures. "Transitional Review Mechanism Pursuant to Section 18 of the Protocol on the accession of the Peopl's Republic of China: Questions from Canada, Mexico and the United States Concerning Subsidies" (G/SCM/Q2/CHN/15, Oct. 13, 2005).

(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. On March 24, 2006, the first session of the U.S.-China Steel Dialogue was held, with the U.S. side led by Deputy Assistant Secretary of Commerce for Asia Henry Levine and Assistant USTR for China Affairs Timothy Stratford. Chinese participants included their Ministry of Commerce and CISA. 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.[64]

In view of the fragmentation of China's steel industry, which makes Chinese companies potential targets in an era of international consolidation and strong domestic growth, the Chinese government has 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 believes 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 National Development and Reform Commission, for the purpose of protecting national "economic safety" in cases of acquisitions by foreign investors. Reportedly, the Ministry plans to draw up a list of "20 to 40 companies" that would be covered by the review policy. One analyst stated that the main purpose of the policy was not so much to prevent foreign investment, as it was to control the supply of advanced technology to modernizing Chinese firms.[65]

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.

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. S. 295, co-sponsored by Senators Charles Schumer and Lindsey Graham, would add 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

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[64] Assistant USTR for China Affairs Timothy Stratford. "Statement at Congressional Steel Caucus Hearing" (Jun. 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" (Jun. 19, 2006 print ed.), p. 2.

[65] *Ibid*., "China to Step Up Scrutiny of Some Foreign Holdings" (June 20, 2006), p. 6.

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.[66]

H.R. 1498, introduced on April 6, 2005 by Representative Tim Ryan and co-sponsored by House Armed Services Committee Chair Duncan Hunter, would approach the currency manipulation issue in a different way. It would define the manipulation of exchange rates in order to gain a trade advantage as a form of countervailable subsidy under U.S. trade law. It would also explicitly make remedies under the law explicitly applicable to imports from the People's Republic of China, and subject any imports so challenged to a national security test, to see if they were injurious to domestically produced goods deemed critical to the U.S. defense industrial base. This bill was co-sponsored by 169 House members. It has been referred to the Ways and Means and Armed Services Committees.

U.S. steel producers have also joined with their customers 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. Current Commerce Department enforcement policy is not to bring CVD cases in these circumstances, but rather to require U.S. producers to seek trade relief exclusively through antidumping laws.[67] 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 apply U.S. countervailing law to nonmarket economies (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.[68]

Meanwhile, the Chinese government itself 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

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[66] CRS Report RS21625, *China's Currency Peg: A Summary of the Economic Issues*, by Wayne M. Morrison and Marc Labonte. See floor speeches of co-sponsoring Sens. Graham and Schumer on Nov. 16, 2005 (*Congressional Record*, pp. 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" (Mar. 29, 2006).

[67] For details on this issue, see CRS Report RL32371, *Trade Remedies: A Primer*, by Vivian C. Jones.

[68] CRS Report IB91121, *China-U.S. Trade Issues*, by Wayne M. Morrison.

extent of continued government intervention in certain important sectors of the economy warrants maintaining China's designation as an NME country."[69]

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 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, despite the terrorist attack on the World Trade Center and other U.S. targets just a few days earlier. 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.[70] 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."[71] 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 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

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[69] 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 Reublic of China (PRC) Status as a Non-Market Economy (NME)," memorandum, antidumping investigation A-570-901 (May 15, 2006).

[70] This estimate was cited in Bureau of National Affairs. *Daily Report for Executives* (*DER*), "Major Steel-Producing Countries Launch Talks on Banning Subsidies at OECD Meeting" (Dec. 20, 2002).

[71] Nancy E. Kelly, "Steel Talks to Kick Off in Paris, Six Issues Seen Hot for Debate," *AMM* (June 10, 2003).

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.[72]

While the basic principle of far-reaching subsidies discipline was apparently accepted, no agreement could be reached by mid-2004. At that point participants agreed that, while the OECD would continue to monitor developments in steel markets, further discussions would be suspended pending a review in early 2005.[73] 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.[74]

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.[75]

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,

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[72] The major issues and course of the talks were reviewed in detail in the archived CRS Report RL31842, *Steel: Section 201 Safeguard Action and International Negotiations*, pp. 35-40.

[73] 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).

[74] *AMM*, "High Steel Demand Cited for Killing Global Subsidy Deal" (Jan. 19, 2005), p. 1.

[75] OECD. "Blueprint for a Steel Subsidies Agreement," attachment to letter from Deputy Secretary General Herwig Schlögl (Mar. 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" (Mar. 24, 2005); and, "OECD Delivers Blueprint for Steel Subsidies Pact" (Apr. 4, 2005).

was that an agreement designed to ban subsidies should not instead focus on carving out exceptions to subsidy discipline.[76]

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. The OECD therefore terminated the high-level discussions.[77] 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.[78]

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).[79] 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.[80] Both houses of Congress approved a bill that includes repeal of this provision, but requires the distribution of duties collected on entries of goods made and filed before October 1, 2007 (P.L. 109-171, §7601).

The U.S. steel industry has generally been a major recipient of the customs duties distributed under the Byrd Amendment. 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 steel producers, Carpenter

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[76] *AMM*, "Pre-Agreed OECD Subsidies Dubbed a 'Deal-Killer' for U.S." (Apr. 8, 2005); and, "OECD's Blueprint Bites into Steel Subsidy Limits" (May 18, 2005).

[77] *DER*, "OECD Calls Off Deadlocked Multilateral Steel Negotiations" (Oct. 7, 2005).

[78] Communication to CRS from U.S. Dept. of Commerce. International Trade Administration (Jan. 11, 2006); *AMM*, "Long-Dead Steel Subsidy Talks Still Influential: OECD Official" (Jun. 19, 2006 print ed.), p. 2.

[79] Included as Title X; codified at 19 USC §1675c.

[80] 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. Grimmett.

Technology, Allegheny Ludlum and North American Stainless, which each received between $10 million and $13 million.[81]

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.[82]

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.[83]

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 108th Congress, but no action was taken on these measures.[84] In the 109th 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 109th Congress.[85] The GAO found that, "Some steel companies acknowledged that the CDSOA disbursements have not been significant in relation to their size or capital

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[81] U.S. Government Accountability Office. *Issues and Effects of Implementing the Continued Dumping and Subsidy Offset Act*, GAO Report 05-979 (Sept. 2005), fig. 8 and tab. 8.

[82] *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* (Sept. 27, 2005). Discussion of the reasons for this distribution and further analysis are in CRS Rept. 33045.

[83] *AMM*, "More or Less, It's a Nice Chunk of Change" (Dec. 12, 2005 print ed.), p. 2.

[84] CRS Rept. 33045.

[85] *AMM*, "CITAC Adds Muscle to Push Repeal of Byrd Amendment" (Feb. 18, 2005), p.1.

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."[86] Both the steel industry and the USWA strongly supported keeping the law in place.[87]

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.[88] 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.[89] Subsequently, the Senate voted 72-19 vote to instruct conferees on the legislation not to accept any repeal of the Byrd Amendment.[90] 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.[91]

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.[92] 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.[93]

The EU, Canada, Japan and Mexico, which were involved in the WTO case against the Byrd Amendment policy, have implemented retaliatory tariffs as

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[86] GAO Rept., p. 70.

[87] See, for example, *Washington Post*, "... Stats from GAO,;" on quotes from USWA President Gerard; and, *AMM*, Nov. 21, 2005, and Nov. 28, 2005 print ed. on steel industry reaction to inclusion of Byrd Amendment repeal in House legislation.

[88] *DER*, "Ways and Means Committee Approves Repeal of Byrd Law" (Oct. 27, 2005), p. A-25.

[89] *AMM*, "House Repeals Byrd, Senate Fate Uncertain" (Nov. 21, 2005), p. 1.

[90] *DER*, "Senate Urges Conferees to Drop Byrd Law Repeal from Budget Bill" (Dec. 16, 2005), p. A-9.

[91] *Inside U.S. Trade*, "Bill Containing Byrd Repeal Clears Senate with Cheney's Vote" (Dec. 21, 2005); *Washington Post*, "Senators Vote to Kill Trade Law" (Dec. 22, 2005), p. D1; *Wall St. Journal*, "U.S. Firms Face Loss of Trade-Duty Revenues" (Dec. 23, 2005). As the bill passed by the Senate contained some changes in other areas from the House-passed version, it must be re-passed by the House in the second session; *DER*, "Vote on Modified Reconciliation Report Pushed back Until February in House" (Dec. 27, 2005), p. G-3.

[92] *Congress Daily*, "'Byrd' Repeal in Budget Measure Contains Key Compromise" (Dec. 20, 2005).

[93] *Congressional Record* (Dec. 21, 2005), p. S14206.

authorized by the WTO. The annual total of these tariffs against U.S. exports is $114 million. They remain in place, pending the definitive repeal of the law, and some of the complainant governments have indicated concern that trade remedy duties collected through October 1, 2007, will continue to be disbursed.[94]

The action of Congress in approving the underlying statute, the Deficit Reduction Act, has been subjected to legal challenges. The issue is whether the enrolled version of the text as sent to and signed by the President in February 2006 accurately reflected the version as passed by each chamber of Congress. Lawsuits seeking to invalidate the entire measure on these grounds have been brought by a number of private parties, as well as by 11 Democratic members of the House, including the ranking members of the Judiciary Committee (John Conyers) and of the Energy and Commerce Committee (John Dingell).[95]

Steel Industry Petitioners Lose Wire Rod Antidumping Case

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 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.[96] Under U.S. trade law, in compliance with WTO rules, AD/CVD actions are reviewed systematically after five years, 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.[97]

In addition to these "sunset reviews," the Commerce Department and the ITC continue to receive petitions in new cases. 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

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[94] *DER,* "Trade Partners Give Cautious Response to U.S. Movement on Byrd Amendment" (Jan. 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" (Jun. 19, 2006), pp. 4-5.

[95] Tthe legal issues are described in a CRS Memorandum, "Constitutionality of the Deficit Reduction Act of 2005," by Thomas J. Nicola (Apr. 5, 2006). On lawsuits against the Act, "House Dems File Suit over Budget Bill Error," *Congress Daily* (Apr. 28, 2006).

[96] 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.

[97] Sunset reviews of AD/CVD orders are discussed in CRS Report RL32371, *Trade Remedies: A Primer*, by Vivian C. Jones.

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.[98]

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 2004.[99] On December 23, 2005, the ITC announced, in a unanimous 6-0 decision, a negative injury finding that terminated the case.[100]

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.[101] 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 "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.[102]

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

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[98] *AMM*, "U.S. Wire Rod Makers Rap Imports from 3 Nations" (Nov. 14, 2005), p. 1.

[99] *AMM*, "He Said, She Said as Rod Case Commences" (Dec. 5, 2005 print ed.), p. 2.

[100] 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 (Dec. 23, 2005); *DER*, "ITC Finds No Injury from Imports of Wire Rod from China, Germany, Turkey" (Dec. 28, 2005), p. A-15; *AMM*, "ITC Finds No Import Injury, Rejects Steel Wire Rod Case" (Dec. 28, 2005, p. 1.

[101] 19 U.S.C. ¶451.

[102] For details, see CRS Report RL32371, *Trade Remedies: A Primer*, by Vivian C. Jones.

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.[103]

On October 3, 2005, a divided ITC found that standard steel pipe imports from China were causing, or threatened to cause, market disruption in the United States. The determination came on a 4-2 vote. 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.[104]

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.[105]

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 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.[106]

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

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[103] *AMM*, "US Producers Seek Relief from Chinese Pipe Imports" (Aug. 3, 2005), p. 1.

[104] USITC. *Circular Welded Non-alloy Steel Pipe from China*, Investigation no. TA-421-6 (Publ. 3807, Oct. 2005).

[105] *AMM*, "Politicians Back Plea for Relief vs. China Pipe" (Dec. 2, 2005), p. 1.

[106] 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), Dec. 30, 2005.

direct competition with imports from China.[107] 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."[108]

For its part, the Bush Administration has indicated that while it perceives problems with China in trade, especially regarding Chinese steel exports, it may prefer to deal with this issue systematically, rather in piecemeal trade cases. During a trip to China just one week before the steel pipe decision, Under Secretary of Commerce for International Trade Franklin Lavin was quoted as saying that the U.S. government would like to start bilateral talks on the steel industry through the auspices of the U.S.-China Joint Commission on Commerce and Trade, operated on the U.S. side in the office of the U.S. Trade Representative. "We'd like to have some discussion on [such] issues and not simply wait until one side files a trade remedy action," Lavin said.[109] This CRS report reviewed above the U.S. positions at the first session of this U.S.-China Steel Dialogue.

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 U.S. Commerce Department in calculating antidumping margins violates WTO rules. "Zeroing" is a mathematical technique applied to imported products being investigated in AD cases and administrative reviews (such as five-year "sunset" cases). In calculating AD duties, which by WTO rules must be no more than the actual dumping margin, U.S. practice is to ignore cases where no dumping is found (i.e., to apply a zero margin in that case). 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 is that the WTO antidumping agreement requires that full weight must be given to "negative dumping margins." The April decision, in a case brought against the United States by the EU, applied this principle for the first time to administrative reviews as well as well initial investigations.[110]

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[107] *AMM*, "The Pressure Is Building in Pipe and Tube" (Jun. 5, 2006 print ed.), pp. 4-5.

[108] *Ibid.*, "President Says No to '421' Help vs. China Pipe" (Jan. 2, 2006), p. 1; "China Sees Rejection of '421' Plea Forging Ties" (Jan. 4, 2006), p. 6; "The Oval Office Bats 4-0 on China Trade, But Critics See Only the Zero" (Jan. 9, 2006), p. 9.

[109] *Wall St. Journal*, "U.S. Hopes to Avoid Steel-Import Battle with China" (Dec. 23, 2005).

[110] *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 (Apr. 18, 2006).

U.S. courts have ruled that zeroing is allowed but not required by U.S. antidumping law.[111] In a letter submitted by U.S. Steel on a proposal by Commerce to alter margin calculations in response to earlier 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.[112]

Dissatisfaction with the impact of evolving pattern of WTO discipline on U.S. trade law, including the series of decisions that have narrowed and possibly eliminated the practice of zeroing is one of the issues addressed in two trade reform bills. H.R. 5043 was introduced on March 29, 2006, by Representative Benjamin Cardin, with two co-sponsors, and HR. 5529, introduced on June 6, 2006 by Representative Philip English, also with two co-sponsors. Both bills propose wide-ranging changes to U.S. trade law, with the support of U.S. steel and other metals producers' associations, and opposition from representatives of some steel-consuming interests.[113]

Both bills would establish a commission to review all WTO decisions adverse to the United States to determine whether the WTO exceeded authority granted under U.S. law, when Congress approved U.S. participation. After three affirmative findings, H.R. 5529 would instruct the U.S. Trade Representative to report back to Congress on efforts to seek appropriate reforms of the organization. Both bills would also require that U.S. private sector representatives be allowed to participate WTO panels discussing cases relevant to their interests. They would also amend domestic trade law in a number of ways advantageous to domestic steel producers. Captive production (for example, semi-finished slabs at domestic integrated mills) would be excluded from calculations of import market share in AD/CVD cases. The ITC would be prevented from considering that imports had no impact on market prices because of low volumes. Safeguard rules would be changed to eliminate any reference to imports being a "substantial" cause of injury (not less than any other cause in present law). In H.R. 5529 Congress, and not the President, would be given the final authority to revoke a country's nonmarket economy status for trade cases. Also in H.R. 5529, the steel monitoring and licensing process, maintained by President Bush after revocation of the steel safeguard measures, would be made permanent and applied to the full range of steel products. H.R. 5043 and H.R. 5529 were referred to the Ways and Means Committee, and H.R. 5529 was additionally referred to the Rules Committee.

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[111] CRS Report RL32014, *WTO Dispute Settlement: Status of U.S. Compliance in Pending Cases*, by Jeanne J. Grimmett, pp. 51-52.

[112] Letter of John J. Mangan *et al.*on behalf of U.S. Steel Corp. to Assistant Secretary of Commerce David Spooner (April 5, 2006).

[113] *AMM*, "Cheers, Jeers for 'Kitchen Sink' Trade Bill" (Apr. 3, 2006 print ed.), p. 2; and, "English Offers Up Sweeping 'Wish List' of Trade Law Reforms" (Jun. 5, 2006 print ed.), p. 2.

Legislation to Give Consumers Standing in Trade Cases

As noted above, many companies in a variety of steel-consuming have been adversely affected by the overall rise in steel prices since 2003. In the first session of the 109th Congress, Representative Joseph Knollenberg introduced H.Res. 84, which stated that the Department of Commerce and the ITC, in conducting sunset reviews of AD/CVD cases, should "take into account and report on, the impact of such duties on steel-consuming manufacturers and the overall economy," and gained 48 cosponsors. In introducing the resolution, Representative Knollenberg stated that Commerce and the ITC "have the discretion to take into account the impact of these duties on steel consumers, and they should. But traditionally they have not ... Removing some specific duties will not harm domestic steel producers, who are doing quite well."[114]

His resolution was supported by organizations that had also called for an early end to President Bush's steel safeguard tariffs. The steel industry is reportedly against giving formal standing to steel consumers in trade cases. Its representatives believe that the resolution would substantively change antidumping law, in which the goal is to determine if material damage was caused to the petitioning industry.[115]

On November 3, 2005, Representative Knollenberg introduced H.R. 4217, which would amend U.S. AD/CVD law to require that the ITC should take into account the harm to industrial users that may result from imposition of trade remedies sought by a domestic producing industry. This bill gained 50 cosponsors by mid-2006. Both items have been referred to the Ways and Means Committee, where there has been no further action.

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[114] *Congressional Record* (Feb. 10, 2005), E16.

[115] MEMA press release, "Auto Suppliers Applaud Congressional Resolution on Steel Hearings" (Feb. 10, 2005); *AMM*, "MEMA Takes Shot at Steel's Profits, Wants Duties Nixed" (Feb. 17, 2005), p. 4.