

CHAPTER 1

INTRODUCTION AND GENERAL OVERVIEW

PART I: INTRODUCTION

BACKGROUND

The Commission instituted this investigation on March 5, 2003, for the purpose of preparing the report to the President and the Congress required by section 204(a)(2) of the Trade Act of 1974 (the Act)¹ on the results of its monitoring of developments with respect to the domestic steel industry since the President imposed tariffs and tariff-rate quotas on imports of certain steel products,² effective March 20, 2002. Information relating to the background of this investigation is presented in table OVERVIEW I-1.

Table OVERVIEW I-1
Chronology of investigation No. TA-204-9

Date	Action
March 5, 2003	Commission institutes investigation No. TA-204-9
March 14, 2003	Commission publishes its notice of institution in the <i>Federal Register</i>
July 10, 2003	Commission's stainless steel hearing
July 17, 2003	Commission's tubular steel hearing
July 22, 2003	Commission's flat steel hearing
July 24, 2003	Commission's long steel hearing
September 19, 2003	Commission's transmittal of report to the President and Congress

Source: *Federal Register* notice 68 FR 12380, March 14, 2003.

Section 204(a)(1) of the Act³ requires the Commission, so long as any action under section 203 of the Act remains in effect, to monitor developments with respect to the domestic industry, including the progress and specific efforts made by workers and firms in the domestic industry to make a positive adjustment to import competition. Section 204(a)(2) of the Act requires that whenever the initial period of an action under section 203 exceeds 3 years, the Commission shall submit a report on the results of the monitoring under section 204(a)(1) to the President and the Congress not later than the mid-point of the initial period of relief during which the action is in effect, or in this case by September 19, 2003.

¹ 19 U.S.C. § 2252(a)(2).

² Subheadings 9903.72.30 through 9903.74.24 of the Harmonized Tariff Schedule of the United States cover the steel products included in these safeguard measures as well as specifying products and sources excluded from the safeguard measures. In the 2003 HTS, subheadings 9903.72.30 through 9903.72.48 cover carbon and alloy steel slabs; subheadings 9903.72.50 through 9903.73.39 cover carbon and alloy steel flat-rolled products (including plate and other hot-rolled steel, cold-rolled steel other than grain-oriented steel, and clad, coated, and plated steel); subheadings 9903.73.42 through 9903.73.62 cover certain carbon and alloy steel bars, rods, and light shapes; subheadings 9903.73.65 through 9903.73.71 cover carbon steel concrete reinforcing bars (rebars); subheadings 9903.73.74 through 9903.73.86 cover certain carbon and alloy steel non-seamless pipes and tubes; subheadings 9903.73.88 through 9903.73.95 cover certain tube and pipe fittings; subheadings 9903.73.97 through 9903.74.16 cover stainless steel bars, rods, angles, shapes, and sections; and subheadings 9903.74.18 through 9903.74.24 cover stainless steel wire.

³ 19 U.S.C. § 2254(a)(1).

The Commission instituted this investigation for the purpose of preparing the report to the President and the Congress required by section 204(a)(2) of the Trade Act of 1974 on the results of its monitoring of developments with respect to the domestic steel industry, including the progress and specific efforts made by workers and firms in the domestic industry to make a positive adjustment to import competition since the President imposed tariffs and tariff-rate quotas on imports of certain steel products, effective March 20, 2002.

The Commission and the parties to this proceeding have given considerable attention to the issue of the meaning of section 204 and the type of data the Commission should collect and the analysis that the Commission should include in its report. In the Commission's view, the basic requirement of the statute (set out in section 204(a)(1) and (2)) is clear; namely, the Commission is to report on the results of its monitoring of developments with respect to the domestic industry, including adjustment efforts and progress by workers and firms to adjust to import competition.⁴ By its nature, such a report will be mainly descriptive, setting out facts relating to, among other things, industry performance, trends in prices and import levels, the market and business environment, and the types of actions undertaken by companies and workers to adjust to competition from imports. Some analysis of these trends and actions, and of the progress and specific efforts made by workers and firms in the domestic industry to make a positive adjustment to import competition, is also appropriate to permit greater understanding of the developments and to place them in context.

Other subsections of section 204 authorize the President to take certain steps following receipt of the ITC's report. Under section 204(b)(1)(A), the President can reduce, modify or terminate a safeguard action if he determines that certain conditions have been met, namely, that the domestic industry has not made adequate efforts to adjust, or changed economic circumstances have impaired the effectiveness of the action.⁵ The President is required to take the ITC's report into account, and the Commission views the information and analysis presented in this report as providing the factual basis for any decision by the President on whether these conditions have been met.⁶

⁴ The Commission also examined the legislative history to section 204 and considered parties' arguments pertaining to it. The legislative history appears to support, and is not contrary to, a plain reading of the statute. Omnibus Trade and Competitiveness Act of 1988, Conference Report to Accompany H.R. 3 at 686-687; H. Report 100-40, Part 1, 100th Congress, 1st session at 108-109 (Report of the Committee on Ways and Means to Accompany H.R. 3; S. Report 100-71, 100th Congress, 1st Session at 61-62 (Report of the Committee on Finance on S. 490); Statement of Administrative Action, published in H. Doc. 103-316, 103rd Congress, 2nd Session at 293; H. Report 103-826, 103rd Congress, 2nd Session at 131 (Report from the Committee on Ways and Means to Accompany H.R. 5110); S. Report 103-412, 103rd Congress, 2nd Session at 111 (Uruguay Round Agreements Act: Joint Report of the Committee on Finance, Committee on Agriculture, Nutrition, and Forestry, and Committee on Governmental Affairs).

⁵ Section 204(a)(4) provides that upon request of the President, the Commission shall advise the President of its judgment as to the probable economic effect on the industry concerned of any reduction, modification, or termination of the action taken under section 203 which is under consideration. However, the President has not made such a request in this investigation.

⁶ The Commission disagrees with certain interpretations of section 204 that go beyond the plain meaning of the statute with respect to either the nature of the ITC's monitoring activity or the basis for the President's determination. For example, despite arguments that the industry would have undertaken adjustment measures even in the absence of the safeguard relief, the statute does not call for the ITC report to demonstrate, or for either the Commission or the President to determine, that the adjustment efforts would not have been undertaken in the absence of the safeguard measures. *See, e.g.*, Joint Respondents' Posthearing Brief at 1-12.

Monitoring efforts to date have consisted of collecting and evaluating information through a variety of means, including:

producer, importer, purchaser, and foreign producer questionnaires,⁷ extensive literature research (including primary and secondary sources), hearings, and written submissions including responses to Commissioners' questions asked at the hearings.

The Commission sent producers' questionnaires to approximately 800 U.S. producers believed to produce the subject steel products during January 2000-March 2003.⁸ One hundred and fifteen firms reported producing the subject steel during this period: 43 firms produced flat steel; 35 firms produced long steel; 32 firms produced tubular steel; and 20 firms produced stainless steel.⁹

The Commission sent importers' questionnaires to approximately 300 U.S. importers believed to import the subject steel products during January 2000-March 2003.¹⁰ Approximately 200 firms reported importing the subject steel during this period: 112 firms imported flat steel; 72 firms imported long steel; 62 firms imported tubular steel; and 55 firms imported stainless steel.¹¹

The Commission posted a foreign producer questionnaire on its website and informed all persons indicating an interest in this investigation via email that hard copies of the foreign producer questionnaire would not be mailed by the Commission but should be downloaded electronically for a response. The Commission received usable responses from 112 foreign producers.

The Commission sent purchasers' questionnaires to approximately 1,800 firms believed to purchase the subject steel products during January 2000-March 2003, and received usable responses from 493 firms. The questionnaires were sent to purchasers of the covered products in the major consuming industries, which together account for more than 90 percent of steel shipments to manufacturing industries.¹²

The Commission held four public hearings at which it received testimony from U.S. steel producers, U.S. steel workers, foreign steel producers, U.S. importers of steel products, U.S. purchasers of steel products, and Congressional and State government witnesses. Relevant *Federal Register* notices appear in appendix A and lists of witnesses that testified at the hearings appear in appendix B.

⁷ Electronic copies of all questionnaires were posted on the Commission's web site at http://www.usitc.gov/investigation204_9.

⁸ U.S. producers were identified from the section 201 investigation mailing list. Firms that had reported in the 201 investigation that they did not produce the 10 products being examined in this section 204 investigation were not sent questionnaires. However, all firms reporting production of any of the 10 products being examined in this investigation plus all firms that did not respond in the section 201 investigation were sent questionnaires.

⁹ Some firms reported producing more than one category of steel products.

¹⁰ U.S. producers also received an importers' questionnaire.

¹¹ Several importers did not provide usable data.

¹² The mailing list was mainly compiled from publicly available information on firms in 22 manufacturing industries, specified by North American Industry Classification System (NAICS) 4-digit categories, that were the largest consumers of steel products in 1997 (latest year available). Together these firms (specified by NAICS) consumed steel products valued at \$71.3 billion, or about 92 percent of the total \$77.6 billion consumed by all manufacturing industries. This list was supplemented with firms identified by major trade associations and firms voluntarily identified by steel producers and importers as principal purchasers of steel for which import relief was granted.

INVESTIGATION NO. TA-201-73

On June 22, 2001, at the request of the United States Trade Representative (USTR) the Commission instituted investigation No. TA-201-73 under section 202 of the Act¹³ to determine whether certain steel products are being imported into the United States in such increased quantities as to be a substantial cause of serious injury, or the threat thereof, to the domestic industry producing an article like or directly competitive with the imported article.¹⁴ On July 26, 2001, the Commission received a resolution from the Committee on Finance of the United States Senate requesting that the Commission conduct an investigation of the same scope. The Commission exercised its authority under section 603 of the Act and consolidated the investigation requested by the Committee on Finance with the Commission's previously-instituted investigation requested by the United States Trade Representative.

On October 22, 2001, the Commission made its determinations with respect to injury. The Commission's determinations are presented in table OVERVIEW I-2. On December 7, 2001, the Commission made its recommendations with respect to remedies and subsequently transmitted its report to the President on December 19, 2001.¹⁵

Table OVERVIEW I-2
Commission's determinations in Investigation No. TA-201-73, by product categories

Commission's determinations	Product categories
Affirmative	carbon and alloy flat-rolled products (slabs, plate, hot-rolled, cold-rolled, and coated), hot bar, cold bar, rebar, welded, fittings, stainless steel bar, and stainless steel rod
Evenly divided	tin, stainless steel wire, stainless fittings and flanges, ¹ and tool steel
Negative	grain oriented silicon electrical steel (GOES), carbon and alloy steel ingots, billets, and blooms, carbon and alloy steel rails and railway products, carbon and alloy steel wire, carbon and alloy steel strand, rope, cable, and cordage, carbon and alloy steel nails, staples, and woven cloth, carbon and alloy steel heavy structural shapes and sheet piling, carbon and alloy steel fabricated structural units, carbon and alloy seamless steel pipe, seamless oil country tubular goods (OCTG), welded OCTG, stainless steel ingots, billets, and blooms, stainless steel cut-to-length plate, stainless steel woven cloth, carbon, alloy, and stainless steel rope, and stainless steel seamless and welded pipe
¹ The President took no action with respect to these products.	
Source: 66 FR 54285, October 26, 2003.	

¹³ 19 U.S.C. § 2252.

¹⁴ 66 FR 35267, July 3, 2001.

¹⁵ 66 FR 67304, December 28, 2001.

SECTION 203 SAFEGUARD MEASURES

Following receipt of the Commission's report,¹⁶ the President, pursuant to section 203 of the Act,¹⁷ imposed import relief in the form of tariffs and tariff-rate quotas on imports of certain steel products for a period of 3 years and 1 day effective March 20, 2002. A compilation of *Federal Register* notice citations concerning the section 203 safeguard measures is presented in appendix A. Table OVERVIEW I-3 presents information on the steel products covered by the safeguard measures and corresponding tariff and tariff-rate quota remedies.

Table OVERVIEW I-3
Section 203 safeguard measures imposed on March 20, 2002, by product and form¹

Item	Type of measure	First year of relief	Second year of relief	Third year of relief
		Percent <i>ad valorem</i>, unless otherwise noted		
Certain carbon and alloy flat-rolled steel:				
Slab	Tariff-rate quota (TRQ)	Increase in duties of 30 percent <i>ad valorem</i> for imports above 4.90 million metric tons	Increase in duties of 24 percent <i>ad valorem</i> for imports above 5.35 million metric tons	Increase in duties of 18 percent <i>ad valorem</i> for imports above 5.81 million metric tons
Plate ²	Increase in duties	30	24	18
Hot-rolled	Increase in duties	30	24	18
Cold-rolled ³	Increase in duties	30	24	18
Coated	Increase in duties	30	24	18
Tin	Increase in duties	30	24	18
Hot bar	Increase in duties	30	24	18
Cold bar	Increase in duties	30	24	18
Rebar	Increase in duties	15	12	9
Welded products ⁴	Increase in duties	15	12	9
Fittings	Increase in duties	13	10	7
Stainless bar	Increase in duties	15	12	9
Stainless rod	Increase in duties	15	12	9
Stainless wire	Increase in duties	8	7	6
¹ The remedy is currently in its second year. See 68 FR 15494, March 31, 2003. ² Cut-to-length (CTL) and clad plate. ³ Other than grain-oriented electrical steel (GOES). ⁴ Other than oil country tubular goods (OCTG). Source: 67 FR 10553, March 7, 2002.				

¹⁶ See *Steel*, Inv. No. TA-201-73, USITC Pub. 3479, December 2001. For additional information on the Commission's section 201 investigation, report, and remedy recommendations, see also, <http://www.usitc.gov/steel/>.

¹⁷ 19 U.S.C. § 2253.

Exempted Countries

The section 203 safeguard measures were applied to imports of subject steel products from all countries except Canada, Israel, Jordan, and Mexico,¹⁸ and developing countries that are members of the World Trade Organization (WTO), whose share of total imports of a particular product did not exceed 3 percent (provided that imports that are the product of all such countries with less than 3 percent import share collectively accounted for not more than 9 percent of total imports of the product). The President’s Proclamation states that if the President determines “that a surge in imports of a product described in paragraph 7 [subject product] of a developing country WTO member undermines the effectiveness of the pertinent safeguard measure, the safeguard measure shall be modified to apply to such product from such country.”¹⁹ Information on the status of WTO developing countries with respect to the section 203 safeguard relief is presented in table OVERVIEW I-4.

Table OVERVIEW I-4
Status of WTO developing countries with respect to the section 203 safeguard measures

Item	Source
Developing countries completely exempted from the safeguard measures ¹	Albania, Angola, Antigua and Barbuda, Argentina, Bahrain, Bangladesh, Barbados, Belize, Benin, Bolivia, Botswana, Brazil, Bulgaria, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Chile, Colombia, Congo (Brazzaville), Congo (Kinshasa), Costa Rica, Cote d’Ivoire, Croatia, Czech Republic, Djibouti, Dominica, Dominican Republic, Ecuador, Egypt, El Salvador, Estonia, Fiji, Gabon, the Gambia, Georgia, Ghana, Grenada, Guatemala, Guinea, Guinea Bissau, Guyana, Haiti, Honduras, Hungary, India, Indonesia, Jamaica, Jordan, Kenya, Kyrgyzstan, Latvia, Lesotho, Lithuania, Macedonia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Moldova, Mongolia, Morocco, Mozambique, Namibia, Niger, Nigeria, Oman, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Romania, Rwanda, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Senegal, Sierra Leone, Slovakia, Solomon Islands, South Africa, Sri Lanka, Suriname, Swaziland, Tanzania, Thailand, Togo, Trinidad and Tobago, Tunisia, Turkey, Uganda, Uruguay, Venezuela, Zambia, and Zimbabwe
Developing countries partially exempted from the safeguard measures (covered products in parenthesis) ²	Brazil (flat steel, except for tin mill products); India (carbon fittings); Moldova (rebar); Romania (carbon fittings); Thailand (welded pipe); Turkey (rebar); and Venezuela (rebar)
¹ See paragraph 12 of the President’s Proclamation of March 5, 2002 (67 FR 10553, March 7, 2002). Macedonia was added to this list subsequent to the original proclamation, effective October 15, 2002 (67 FR 69065, November 14, 2002). ² See 67 FR 10553, March 7, 2002. Thailand (carbon fittings) was added subsequent to the original proclamation (67 FR 12635, March 19, 2002).	
Source: Cited <i>Federal Register</i> notices.	

Countries covered by the section 203 safeguard measures are referred to as “covered sources” while countries not covered by relief (exempted) are referred to as “noncovered sources,” except as noted.

¹⁸ See paragraph 11 of the President’s Proclamation of March 5, 2002 (67 FR 10553, March 7, 2002).

¹⁹ See paragraph 12 of the President’s Proclamation of March 5, 2002 (67 FR 10553, March 7, 2002).

Table OVERVIEW I-5 presents a list of noncovered developing countries accounting for 3 percent or more of total U.S. imports on a product basis during April 2002-March 2003 (the 12-month period following the imposition of relief). Imports from 9 developing countries exempted from the section 201 relief exceeded the 3 percent threshold for one or more products (based on quantity) during the period April 2002-March 2003: Argentina (hot bar); Brazil (tin and rebar); Czech Republic (rebar); Dominican Republic (rebar); Egypt (rebar); India (welded, stainless bar, stainless rod, and stainless wire); Latvia (rebar); Romania (rebar); and Turkey (hot bar and welded).

Table OVERVIEW I-5

Subject steel: Noncovered developing countries¹ accounting for 3 percent or more of total U.S. imports during April 2002-March 2003, by products and by sources, April 2000-March 2003²

Item	April 2000-March 2001	April 2001-March 2002	April 2002-March 2003	Period change from period 2 to period 3
Share of total imports based on quantity (percent)				Percentage point
Tin:				
Brazil	10.1	8.2	6.3	-1.9
Hot bar:				
Argentina	2.1	0.6	3.2	2.6
Turkey	6.0	2.9	3.5	0.6
Subtotal	8.1	3.5	6.7	3.2
Rebar:				
Brazil	3.1	2.0	8.3	6.3
Czech Republic	2.8	3.1	4.3	1.2
Dominican Republic	0.0	1.0	7.4	6.4
Egypt	0.0	2.1	13.2	11.1
Latvia	8.0	1.8	3.4	1.6
Romania	1.2	2.1	5.2	3.1
Subtotal	15.1	12.1	41.8	29.7
Welded:				
India	1.3	1.8	5.6	3.8
Turkey	1.1	1.7	5.7	4.0
Subtotal	2.4	3.5	11.3	7.8
Stainless bar:				
India	2.7	7.8	21.5	13.7
Stainless rod:				
India	9.8	3.1	11.1	8.0
Stainless wire:				
India	8.9	12.1	21.2	9.1

¹ Several noncovered developing countries have products that are covered by the safeguard relief: Brazil (flat steel, except for tin mill products); India (carbon fittings); Moldova (rebar); Romania (carbon fittings); Thailand (welded pipe); Turkey (rebar); and Venezuela (rebar). See paragraph 12 of the President's Proclamation of March 5, 2002 (67 FR 10553, March 7, 2002). Thailand (carbon fittings) was added subsequent to the original proclamation (67 FR 12635, March 19, 2002).

² For the following forms of flat-rolled steel, 8 countries had imports accounting for 3 percent or more of total U.S. imports during April 2002-March 2003: plate (Bulgaria (3.9 percent), Czech Republic (9.9 percent), and Romania (14.6 percent)); hot-rolled (Egypt (5.8 percent), Thailand (3.5 percent), and Turkey (6.9 percent)); cold-rolled (Chile (4.4 percent) and Turkey (4.4 percent)); and coated (India (16.7 percent)).

Note.—Period changes are calculated from the unrounded figures.

Source: Compiled from official statistics of Commerce.

Excluded Products

The President's proclamation of March 5, 2002, contained a list of products excluded from relief and classified for reporting purposes in 51 temporary Harmonized Tariff Schedule (HTS) subheadings.²⁰ Subsequently, USTR announced three additional lists of product exclusions²¹ covering numerous additional products so that by March 31, 2003, the date of publication of the most recent list and also the end of the period examined in this report, there were 513 temporary HTS subheadings identifying the excluded products.²²

Table OVERVIEW I-6 presents information on U.S. imports from covered sources excluded from section 203 import tariffs. Slab, excluded imports accounted for *** percent of total imports (based on quantity) and *** of total imports (based on value). However, virtually all slab imports in the period April 2002 to March 2003 were not subject to additional tariffs. The total quantity of slab imports (*** short tons) was well below the overall TRQ threshold applicable to the first relief year (5.40 million short tons) set out in the President's proclamation imposing relief. As a result of product exclusions, during April 2002-March 2003, *** percent of the quantity and *** percent of the value of subject steel imports from covered countries that falls within the subject product description is excluded from the safeguard tariffs.²³ Slab imported below the applicable tariff-rate quota (TRQ) threshold accounted for most of the quantity of excluded imports.

Table OVERVIEW I-6

Subject steel: U.S. imports from covered sources, by tariff categories and by products, April 2002-March 2003

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²⁰ See Annex to Presidential Proclamation 7529 (67 FR 10558, March 7, 2002). Additionally, 3 temporary HTS subheadings identify the tariff quota levels for slab.

²¹ Proclamation 7529 delegated to the USTR the authority to consider requests for exclusion of a particular product submitted in accordance with the procedures set forth in 66 FR 54321, 54322-54323 (October 26, 2001) and, upon publication in the *Federal Register* of a notice of USTR's finding that a particular product should be excluded, to modify the HTS provision created by the annex to that proclamation to exclude such particular product from the pertinent safeguard measure.

USTR considers requests by producers, importers, and purchasers of certain steel products for the exclusion of a particular product, defined in terms of its unique physical characteristics, from any increased duty, tariff-rate quota, or quantitative restriction that the President may impose under section 203(a) of the Trade Act. See also 67 FR 79956, December 31, 2002.

²² See table OVERVIEW I-2 of this report for a list of relevant *Federal Register* notices containing product exclusion announcements.

²³ A significant number of product exclusions were not announced until July 12, 2002 (67 FR 46221) and August 30, 2002 (67 FR 56182). Additional product exclusions were announced on March 31, 2003 (68 FR 15494).

WTO STEEL SAFEGUARD PROCEEDINGS

Following the announcement of the U.S. safeguard measures, several steel exporters to the U.S. market requested consultations with the United States under the WTO Safeguards Agreement, and following implementation of the measures requested consultations with the United States under the WTO Dispute Settlement Understanding (DSU). Following consultations, Brazil, China, the European Union, Japan, Korea, New Zealand, Norway, and Switzerland requested establishment of panels under the DSU, and a panel was formed on July 25, 2002 to hear the disputes. The panel conducted its proceedings principally during fall 2002.

In July 2003, the panel issued its reports finding that the U.S. safeguard measures were inconsistent with the United States' WTO obligations in certain respects.²⁴ The United States and the eight other parties have each appealed certain findings of the panel, and the matter is now before the WTO Appellate Body.²⁵

TITLE VII STEEL ORDERS

A list of outstanding antidumping and countervailing duty orders on the subject steel products is presented in table OVERVIEW I-7. There are currently 110 outstanding antidumping and countervailing duty orders covering carbon and alloy flat-rolled steel, tin, rebar, welded pipe, fittings, stainless bar, and stainless rod.

Since March 20, 2002, the effective date of the section 203 measures, the Commission completed antidumping and countervailing duty investigations on two forms of steel covered by the measures, circular welded non-alloy steel pipe²⁶ and certain cold-rolled steel products.²⁷ The Commission made negative determinations with respect to both products.²⁸ Thus, no new orders have

²⁴ See WTO Panel Reports, *United States—Definitive Safeguard Measures on Imports of Certain Steel Products*, WT/DS248/R/Corr.1, WT/DS249/R/Corr.1, WT/DS251/R/Corr.1, WT/DS252/R/Corr.1, WT/DS253/R/Corr.1, WT/DS254/R/Corr.1, WT/DS258/R/Corr.1, WT/DS259/R/Corr.1, July 11, 2003.

²⁵ The United States and all eight other parties have filed appeals with the WTO Appellate Body, all briefs have been filed, a hearing is scheduled before the Appellate Body for September 29-30, 2003, and a decision is expected in November 2003.

²⁶ See 67 FR 45541, July 9, 2002. See also, *Circular Welded Non-Alloy Steel Pipe from China*, Inv. No. 731-TA-943 (Final), USITC Pub. 3523, June 2002.

²⁷ See 67 FR 58074, September 13, 2002. See also, *Certain Cold-Rolled Steel Products from Australia, India, Japan, Sweden, and Thailand*, Invs. Nos. 731-TA-965, 971-972, 979, and 981 (Final), USITC Pub. 3536, September 2002. See also 67 FR 68685, November 12, 2002. See also, *Certain Cold-Rolled Steel Products from Argentina, Belgium, Brazil, China, France, Germany, Korea, the Netherlands, New Zealand, Russia, South Africa, Spain, Taiwan, Turkey, and Venezuela*, Invs. Nos. 701-TA-423-425 and 731-TA-964, 966-970, 973-978, 980, and 982-983 (Final), USITC Pub. 3551, October 2002.

²⁸ In both of the foregoing grouped investigations, the Commission considered the existence of section 203 safeguard measures as a condition of competition. See, e.g., *Circular Welded Non-Alloy Steel Pipe from China*, Inv. No. 731-TA-943 (Final), USITC Pub. 3523, June 2002, at 6; *Certain Cold-Rolled Steel Products from Australia, India, Japan, Sweden, and Thailand*, Invs. Nos. 731-TA-965, 971-972, 979, and 981 (Final), USITC Pub. 3536, September 2002, at 28.

Table OVERVIEW I-7
Subject steel: Outstanding antidumping and countervailing duty orders

Order date	Continued date	Product	Source	ITC investigation number	Commerce investigation number
06/13/1979	12/15/2000	Carbon steel plate	Taiwan	AA-197	A-583-080
05/07/1984	08/22/2000	Small diameter carbon steel pipe	Taiwan	731-TA-132	A-583-008
03/07/1986	08/22/2000	Welded carbon steel pipe	Turkey	701-TA-253	C-489-502
03/11/1986	08/22/2000	Welded carbon steel pipe	Thailand	731-TA-252	A-549-502
05/12/1986	08/22/2000	Welded carbon steel pipe	India	731-TA-271	A-533-502
05/15/1986	08/22/2000	Welded carbon steel pipe	Turkey	731-TA-273	A-489-501
12/17/1986	01/06/2000	Carbon steel butt-weld pipe fittings	Brazil	731-TA-308	A-351-602
12/17/1986	01/06/2000	Carbon steel butt-weld pipe fittings	Taiwan	731-TA-310	A-583-605
02/10/1987	01/06/2000	Carbon steel butt-weld pipe fittings	Japan	731-TA-309	A-588-602
03/27/1989	08/22/2000	Light-walled rectangular tube	Taiwan	731-TA-410	A-583-803
05/26/1989	08/22/2000	Light-walled rectangular tube	Argentina	731-TA-409	A-357-802
07/06/1992	01/06/2000	Carbon steel butt-weld pipe fittings	China	731-TA-520	A-570-814
07/06/1992	01/06/2000	Carbon steel butt-weld pipe fittings	Thailand	731-TA-521	A-549-807
11/02/1992	08/22/2000	Circular welded nonalloy steel pipe	Brazil	731-TA-532	A-351-809
11/02/1992	08/22/2000	Circular welded nonalloy steel pipe	Korea	731-TA-533	A-580-809
11/02/1992	08/22/2000	Circular welded nonalloy steel pipe	Taiwan	731-TA-536	A-583-814
11/02/1992	08/22/2000	Circular welded nonalloy steel pipe	Mexico	731-TA-534	A-201-805
08/17/1993	12/15/2000	Carbon steel plate	Sweden	701-TA-327	C-401-804
08/17/1993	12/15/2000	Carbon steel plate	Spain	701-TA-326	C-469-804
08/17/1993	12/15/2000	Carbon steel plate	Germany	701-TA-322	C-428-817
08/17/1993	12/15/2000	Carbon steel plate	United Kingdom	701-TA-328	C-412-815
08/17/1993	12/15/2000	Carbon steel plate	Mexico	701-TA-325	C-201-810
08/17/1993	12/15/2000	Carbon steel plate	Brazil	701-TA-320	C-351-818
08/17/1993	12/15/2000	Carbon steel plate	Belgium	701-TA-319	C-423-806
08/17/1993	12/15/2000	Corrosion-resistant carbon steel flat products	France	701-TA-348	C-427-810
08/17/1993	12/15/2000	Corrosion-resistant carbon steel flat products	Korea	701-TA-350	C-580-818
08/17/1993	12/15/2000	Corrosion-resistant carbon steel flat products	Germany	701-TA-349	C-428-817
08/19/1993	12/15/2000	Carbon steel plate	Romania	731-TA-584	A-485-803
08/19/1993	12/15/2000	Carbon steel plate	Brazil	731-TA-574	A-351-817
08/19/1993	12/15/2000	Carbon steel plate	United Kingdom	731-TA-587	A-412-814
08/19/1993	12/15/2000	Carbon steel plate	Poland	731-TA-583	A-455-802
08/19/1993	12/15/2000	Carbon steel plate	Finland	731-TA-576	A-405-802
08/19/1993	12/15/2000	Carbon steel plate	Mexico	731-TA-582	A-201-809
08/19/1993	12/15/2000	Carbon steel plate	Germany	731-TA-578	A-428-816
08/19/1993	12/15/2000	Carbon steel plate	Belgium	731-TA-573	A-423-805
08/19/1993	12/15/2000	Carbon steel plate	Spain	731-TA-585	A-469-803
08/19/1993	12/15/2000	Carbon steel plate	Sweden	731-TA-586	A-401-805
08/19/1993	12/15/2000	Corrosion-resistant carbon steel flat products	Canada	731-TA-614	A-122-822
08/19/1993	12/15/2000	Corrosion-resistant carbon steel flat products	Korea	731-TA-618	A-580-816
08/19/1993	12/15/2000	Corrosion-resistant carbon steel flat products	Australia	731-TA-612	A-602-803
08/19/1993	12/15/2000	Corrosion-resistant carbon steel flat products	Japan	731-TA-617	A-588-826
08/19/1993	12/15/2000	Corrosion-resistant carbon steel flat products	France	731-TA-615	A-427-808
08/19/1993	12/15/2000	Corrosion-resistant carbon steel flat products	Germany	731-TA-616	A-428-815

Table continued. See footnote at end of table.

Table OVERVIEW I-7--Continued
Subject steel: Outstanding antidumping and countervailing duty orders

Order date	Continued date	Product	Source	ITC investigation number	Commerce investigation number
12/01/1993	08/02/2000	Stainless steel wire rod	India	731-TA-638	A-533-808
01/28/1994	08/02/2000	Stainless steel wire rod	France	731-TA-637	A-427-811
01/28/1994	08/02/2000	Stainless steel wire rod	Brazil	731-TA-636	A-351-819
02/21/1995	04/18/2001	Stainless steel bar	Brazil	731-TA-678	A-351-825
02/21/1995	04/18/2001	Stainless steel bar	Japan	731-TA-681	A-588-833
02/21/1995	04/18/2001	Stainless steel bar	India	731-TA-679	A-533-810
03/02/1995	04/18/2001	Stainless steel bar	Spain	731-TA-682	A-469-805
07/02/1996	11/16/2001	Clad steel plate	Japan	731-TA-739	A-588-838
04/17/1997	03/26/2003	Steel concrete reinforcing bar	Turkey	731-TA-745	A-489-807
10/24/1997	08/29/2003	Carbon steel plate ¹	Russia	731-TA-754	A-821-808
10/24/1997	08/29/2003	Carbon steel plate ¹	Ukraine	731-TA-756	A-823-808
10/24/1997	08/29/2003	Carbon steel plate ¹	China	731-TA-753	A-570-849
09/15/1998		Stainless steel wire rod ²	Korea	731-TA-772	A-580-829
09/15/1998		Stainless steel wire rod ²	Spain	731-TA-773	A-469-807
09/15/1998		Stainless steel wire rod ²	Sweden	731-TA-774	A-401-806
09/15/1998		Stainless steel wire rod ²	Taiwan	731-TA-775	A-583-828
09/15/1998		Stainless steel wire rod ²	Japan	731-TA-771	A-588-843
09/15/1998		Stainless steel wire rod ²	Italy	731-TA-770	A-475-820
09/15/1998		Stainless steel wire rod ²	Italy	701-TA-373	C-475-821
06/29/1999		Hot-rolled carbon steel flat products	Japan	731-TA-807	A-588-846
07/06/1999		Hot-rolled carbon steel flat products ¹	Brazil	701-TA-384	C-351-829
07/06/1999		Hot-rolled carbon steel flat products	Brazil	731-TA-806	A-351-828
07/12/1999		Hot-rolled carbon steel flat products	Russia	731-TA-808	A-821-809
02/10/2000		Carbon steel plate	Korea	701-TA-391	C-580-837
02/10/2000		Carbon steel plate	Indonesia	701-TA-389	C-560-806
02/10/2000		Carbon steel plate	Japan	731-TA-820	A-588-847
02/10/2000		Carbon steel plate	India	731-TA-817	A-533-817
02/10/2000		Carbon steel plate	India	701-TA-388	C-533-818
02/10/2000		Carbon steel plate	Indonesia	731-TA-818	A-560-805
02/10/2000		Carbon steel plate	Korea	731-TA-821	A-580-836
02/10/2000		Carbon steel plate	Italy	701-TA-390	C-475-827
02/10/2000		Carbon steel plate	Italy	731-TA-819	A-475-826
02/10/2000		Carbon steel plate	France	731-TA-816	A-427-816
02/10/2000		Carbon steel plate	France	701-TA-387	C-427-817
08/28/2000		Tin mill products	Japan	731-TA-860	A-588-854
05/19/2001		Stainless steel angle	Korea	731-TA-889	A-580-846
05/19/2001		Stainless steel angle	Japan	731-TA-888	A-588-856
05/19/2001		Stainless steel angle	Spain	731-TA-890	A-469-810

Table continued. See footnotes at end of table.

Table OVERVIEW I-76--Continued

Subject steel: Outstanding antidumping and countervailing duty orders

Order date	Continued date	Product	Source	ITC investigation number	Commerce investigation number
09/07/2001		Steel concrete reinforcing bar	Moldova	731-TA-879	A-841-804
09/07/2001		Steel concrete reinforcing bar	Poland	731-TA-880	A-455-803
09/07/2001		Steel concrete reinforcing bar	Ukraine	731-TA-882	A-823-809
09/07/2001		Steel concrete reinforcing bar	Indonesia	731-TA-875	A-560-811
09/07/2001		Steel concrete reinforcing bar	Korea	731-TA-877	A-580-844
09/07/2001		Steel concrete reinforcing bar	Belarus	731-TA-873	A-822-804
09/07/2001		Steel concrete reinforcing bar	China	731-TA-874	A-570-860
09/07/2001		Steel concrete reinforcing bar	Latvia	731-TA-878	A-449-804
09/11/2001		Hot-rolled carbon steel flat products	Argentina	701-TA-404	C-357-815
09/19/2001		Hot-rolled carbon steel flat products	South Africa	731-TA-905	A-791-809
09/19/2001		Hot-rolled carbon steel flat products	Argentina	731-TA-898	A-357-814
11/21/2001		Hot-rolled carbon steel flat products	Kazakhstan	731-TA-902	A-834-806
11/29/2001		Hot-rolled carbon steel flat products	Ukraine	731-TA-908	A-823-811
11/29/2001		Hot-rolled carbon steel flat products	Taiwan	731-TA-906	A-583-835
11/29/2001		Hot-rolled carbon steel flat products	Netherlands	731-TA-903	A-421-807
11/29/2001		Hot-rolled carbon steel flat products	China	731-TA-899	A-570-865
11/29/2001		Hot-rolled carbon steel flat products	Thailand	731-TA-907	A-549-817
11/29/2001		Hot-rolled carbon steel flat products	Romania	731-TA-904	A-485-806
12/03/2001		Hot-rolled carbon steel flat products	Indonesia	701-TA-406	C-560-813
12/03/2001		Hot-rolled carbon steel flat products	India	731-TA-900	A-533-820
12/03/2001		Hot-rolled carbon steel flat products	Indonesia	731-TA-901	A-560-812
12/03/2001		Hot-rolled carbon steel flat products	India	701-TA-405	C-533-821
12/03/2001		Hot-rolled carbon steel flat products	South Africa	701-TA-407	C-791-810
12/03/2001		Hot-rolled carbon steel flat products	Thailand	701-TA-408	C-549-818
12/06/2001		Welded large diameter line pipe	Japan	731-TA-919	A-588-857
02/27/2002		Welded large diameter line pipe	Mexico	731-TA-920	A-201-828
03/07/2002		Stainless steel bar	Italy	731-TA-915	A-475-829
03/07/2002		Stainless steel bar	Germany	731-TA-914	A-428-830
03/07/2002		Stainless steel bar	Korea	731-TA-916	A-580-847
03/07/2002		Stainless steel bar	France	731-TA-913	A-427-820
03/07/2002		Stainless steel bar	United Kingdom	731-TA-918	A-412-822
03/08/2002		Stainless steel bar	Italy	701-TA-413	C-475-830

¹ Suspended.

² The Commission instituted a five-year review investigation on August 1, 2003.

Source: Commission's web site: http://www.usitc.gov/7ops/ad_cvd_orders.htm.

been issued since the application of the section 203 safeguard measure.²⁹ On June 20, 2002, the Commission determined that an industry in the United States is not materially injured or threatened with material injury by reason of imports of circular welded non-alloy steel pipe from China. On August 27, 2002, the Commission determined that an industry in the United States is not materially injured or threatened with material injury by reason of imports of certain cold-rolled steel products from Australia, India, Japan, Sweden, and Thailand. On October 16, 2002, the Commission determined that an industry in the United States is not materially injured or threatened with material injury by reason of imports of certain cold-rolled steel products from Argentina, Belgium, Brazil, China, France, Germany, Korea, the Netherlands, New Zealand, Russia, South Africa, Spain, Taiwan, Turkey, and Venezuela.

Also, since March 20, 2002, the Commission conducted five-year reviews of outstanding orders and/or suspension agreements covering rebar³⁰ and CTL plate;³¹ as a result of those reviews, those orders and agreements remain in place (with the exception of the suspension agreement on CTL plate from South Africa). The Commission also has initiated a review of stainless steel wire rod.³²

ORGANIZATION OF THE REPORT AND GENERAL ISSUES

The presentation of information collected in this investigation has been organized into five major parts: (1) introduction and general overview; (2) carbon and alloy flat steel; (3) carbon and alloy long steel; (4) carbon and alloy tubular steel; and (5) stainless steel.

The introduction and general overview includes information on current market factors (overall demand, demand in specific U.S. downstream sectors, input costs, and exchange rates), developments in the U.S. steel market, and developments in the global steel market. The subsequent four chapters are divided into sections containing a list of U.S. producers in each of the respective industries, information on recent industry structural developments, industry and market data (trade, financial, and pricing) organized by product, and adjustment efforts undertaken by firms and workers. A summary of data collected, by product, is presented in appendix C. A description of the manufacturing and uses of the relevant products appears in appendix D. U.S. producers' positions with respect to the 201 relief are presented in appendix E.

Much of the data used in the preparation of this report has been obtained from responses to the Commission's questionnaires, the Commission's hearings, and written submissions to the Commission, supplemented by secondary sources (*e.g.*, official Commerce statistics for U.S. imports), where appropriate.

²⁹ On September 9, 2003, eight domestic producers filed a petition for the imposition of antidumping duties on certain welded pipe. Accordingly, effective September 9, 2003, the Commission instituted Investigations Nos. 731-TA-1054-1055 (Preliminary), *Light-Walled Rectangular Pipe and Tube from Mexico and Taiwan*.

³⁰ 68 FR 10032, March 3, 2003. *See also*, *Steel Concrete Reinforcing Bar from Turkey*, Inv. No. 731-TA-745 (Review), USITC Pub. 3577, February 2003.

³¹ 68 FR 52614, September 4, 2003. *See also*, *Cut-to-Length Carbon Steel Plate from China, Russia, South Africa, and Ukraine*, Invs. Nos. 731-TA-753-756 (Review), USITC Pub. 3626, August 2003.

³² 68 FR 45277, August 1, 2003.

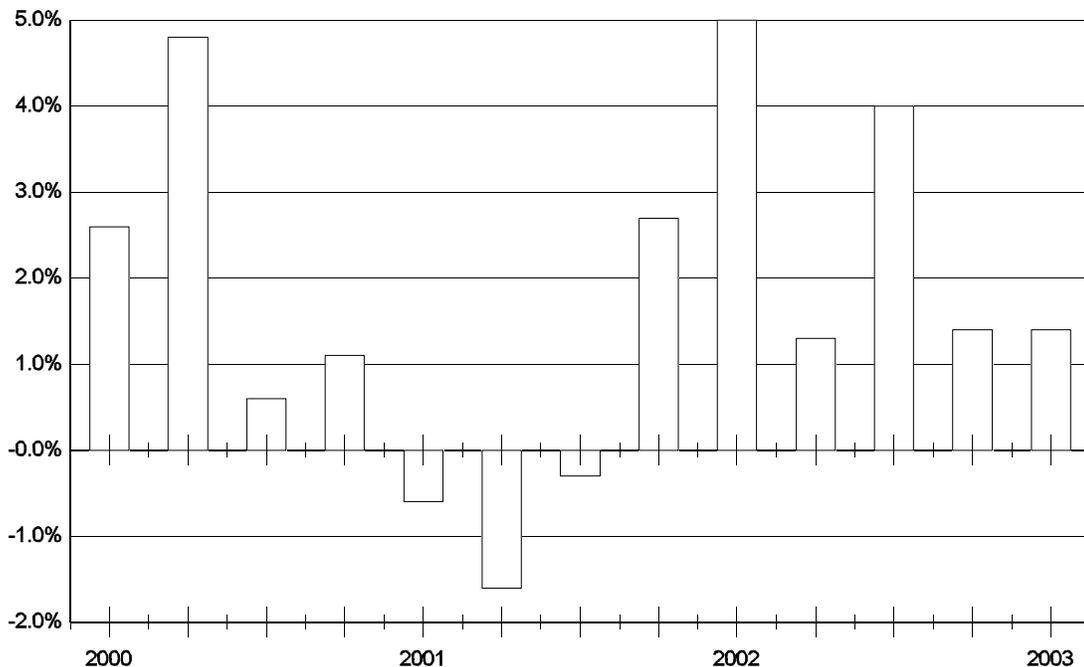
PART II: CURRENT MARKET FACTORS

OVERALL DEMAND

All steel products subject to this investigation are used in the production of downstream products. As a result, U.S. demand for the subject products is derived from demand for these downstream products. Changes in U.S. demand for many of the downstream products, in turn, is mirrored in fluctuations in overall U.S. economic activity, popularly measured by changes in the growth of U.S. real gross domestic product (GDP), shown in figure OVERVIEW II-1.

Figure OVERVIEW II-1

U.S. real GDP: Percent change from the previous period (quarter to quarter) based on billions of chained (1996) dollars at annual rates, by quarters, January 2000-March 2003



Note: Real GDP figures currently use 1996 as the base-year (nominal expenditures in 1996 are defined to equal real expenditures in that year). Each year's real GDP figures are calculated by using a statistical technique of chaining to calculate quantity indexes for each year by applying price weights of the current year to the previous year's quantity index. The percentage changes in real GDP from period-to-period based on chain indexes are not affected by shifting to a new base-year, but the chained-dollar estimates of the components of real GDP usually are not additive.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, July 2003, p. D-4.

Other measures of economic activity include the Federal Reserve's index of industrial production and index of durable consumer goods production (figure OVERVIEW II-2). Since April 2002, the index of industrial production showed very little change, falling by less than 0.1 percent. During the same time frame, the index of durable goods production increased by 3.2 percent.

Figure OVERVIEW II-2
Production indexes: Indexes of industrial production and durable goods production, seasonally adjusted, by quarters, January 2000-June 2003



Source: U.S. Federal Reserve.

DEMAND IN SPECIFIC U.S. DOWNSTREAM SECTORS

The downstream sectors analyzed were chosen based on their importance in consumption of the individual section 204 product categories (figures OVERVIEW II-3-OVERVIEW II-9). Because of data limitations, some of these sectors are proxies for those that would be most relevant, and some downstream sectors account for more consumption of the individual section 204 products than other downstream sectors.

Data for the specific downstream sectors are based on manufacturers' shipments or construction put in place on a quarterly basis. Except in a single instance (steel cans) where quantities were reported, the data are in current (nominal) U.S. dollars. In addition, the data for the downstream sectors were readily available only on a non-seasonally adjusted basis. As a result, quarter-to-quarter trends are likely influenced at least somewhat by price changes (where value-based data are shown) and by seasonal fluctuations; movements in nominal values mask changes in real-value terms.

Table OVERVIEW II-1 shows the specific downstream sectors chosen, the change in value between first quarter 2002 and first quarter 2003, and the associated steel product category.

Table OVERVIEW II-1

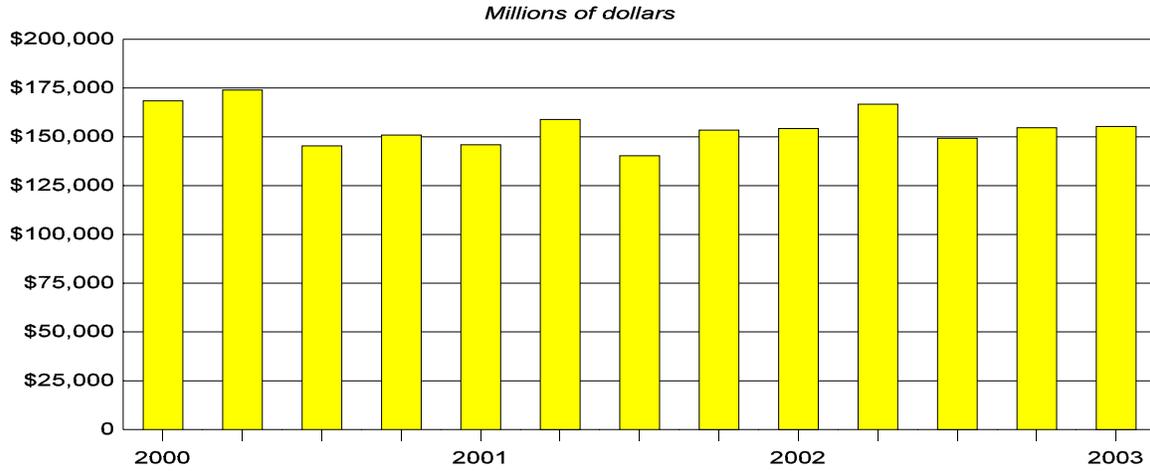
Selected downstream sectors, the change in shipment or construction value between Q1 2002 and Q1 2003, and the associated steel product category

Downstream sector	Change in value between Q1 2002 and Q1 2003	Associated steel product category
	<i>Percent</i>	
Transportation equipment	0.7	Certain flat-rolled products, hot-rolled bar, cold-finished bar, and stainless steel bar
Steel cans ¹	-3.8	Tin mill products
Carbon steel forgings	-1.9	Hot-rolled bar and cold-finished bar
Stainless steel forgings	-6.1	Stainless steel bar
Nonresidential construction ²	-4.8	Certain flat-rolled products, hot-rolled bar, cold-finished bar, rebar, welded tubular products, and fittings
Utilities, pipelines, and railroads ²	-5.1	Welded tubular products and fittings
Metalworking machinery	-9.5	Stainless steel rod and stainless steel wire
¹ Measured by quantity. ² Measures by value of construction put in place.		
Source: U.S. Census Bureau, Can Manufacturers' Institute, and Forging Industry Association		

Transportation Equipment

Figure OVERVIEW II-3

Transportation equipment: Value of U.S. manufacturers' shipments of transportation equipment, by quarters, January 2000-March 2003

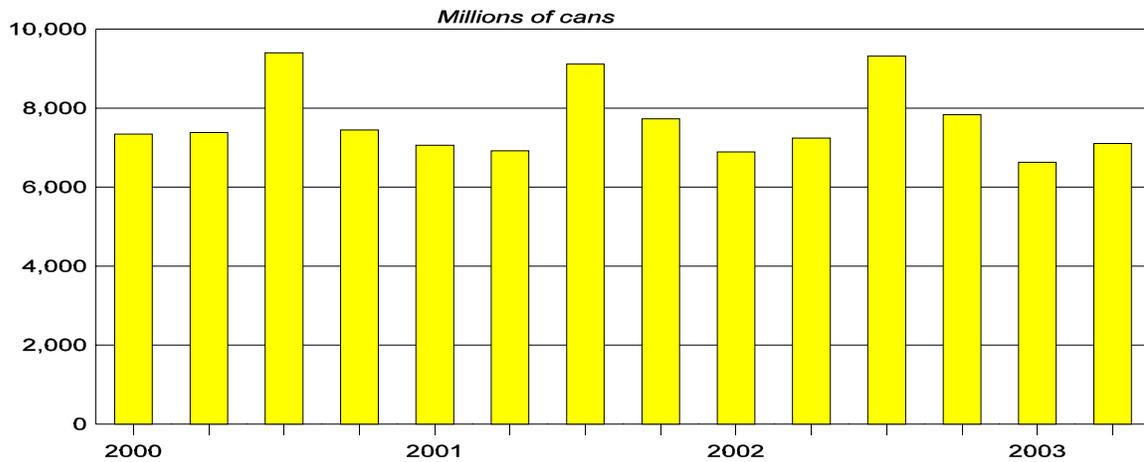


Source: U.S. Census Bureau, *M3 Series-Value of Manufacturers' Shipments*.

Steel Cans

Figure OVERVIEW II-4

Steel cans: Quantity of U.S. manufacturers' shipments of steel cans for food, by quarters, January 2000-June 2003

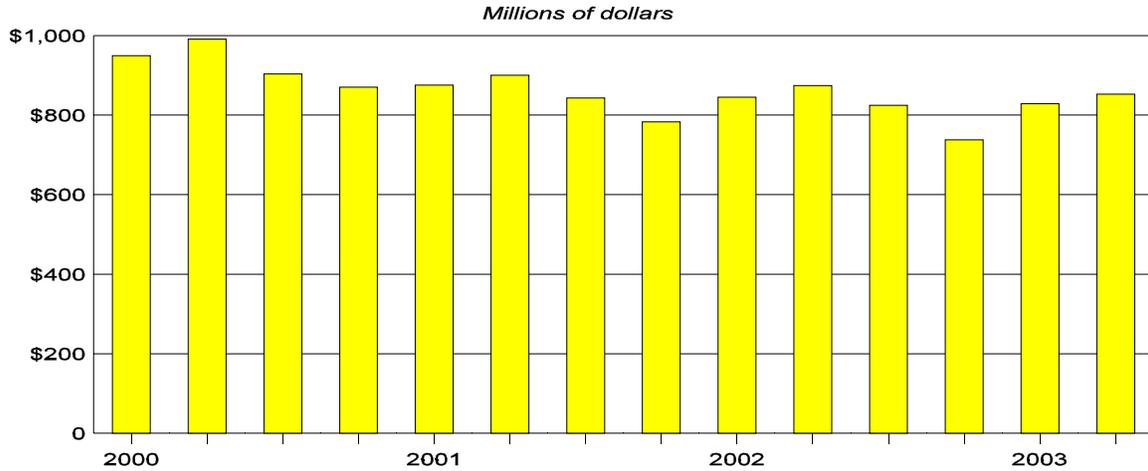


Source: The Can Manufacturers' Institute.

Carbon Steel Forgings

Figure OVERVIEW II-5

Carbon steel forgings: Value of U.S. manufacturers' shipments of carbon, carbon alloy, and micro alloy steel forgings, by quarters, January 2000-June 2003

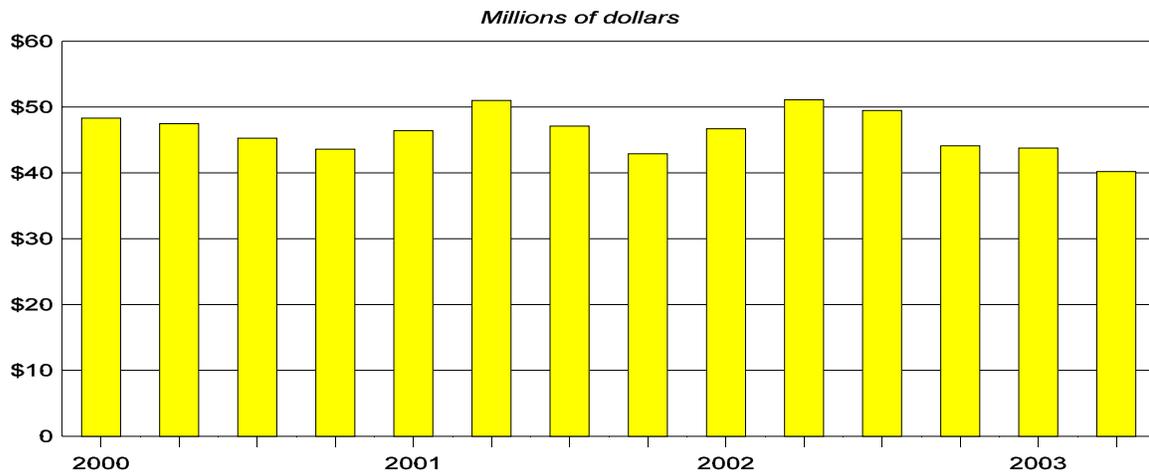


Source: The Forging Industry Association.

Stainless Steel Forgings

Figure OVERVIEW II-6

Stainless steel forgings: Value of U.S. manufacturers' shipments of stainless steel forgings, by quarters, January 2000-June 2003

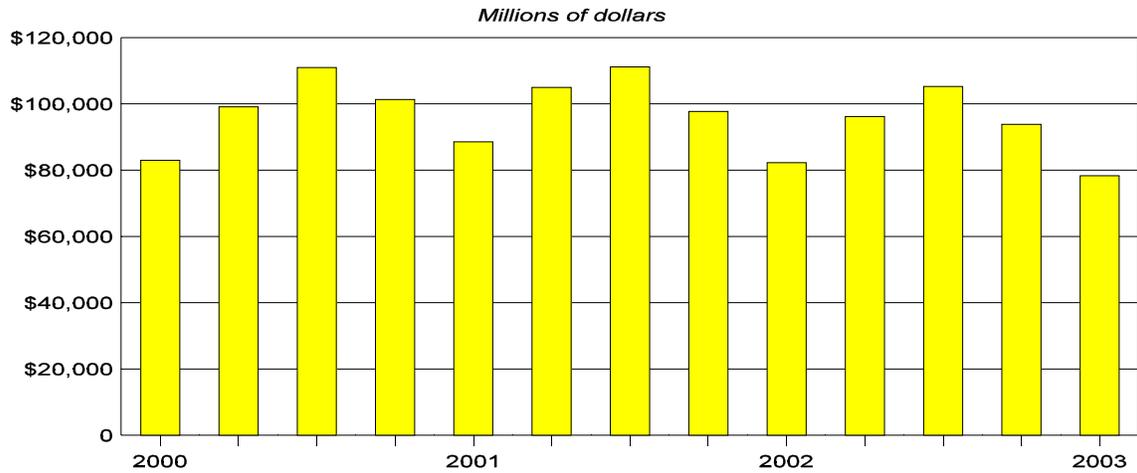


Source: The Forging Industry Association.

Nonresidential Construction

Figure OVERVIEW II-7

Nonresidential construction: Value of U.S. nonresidential construction put in place, by quarters, January 2000-March 2003

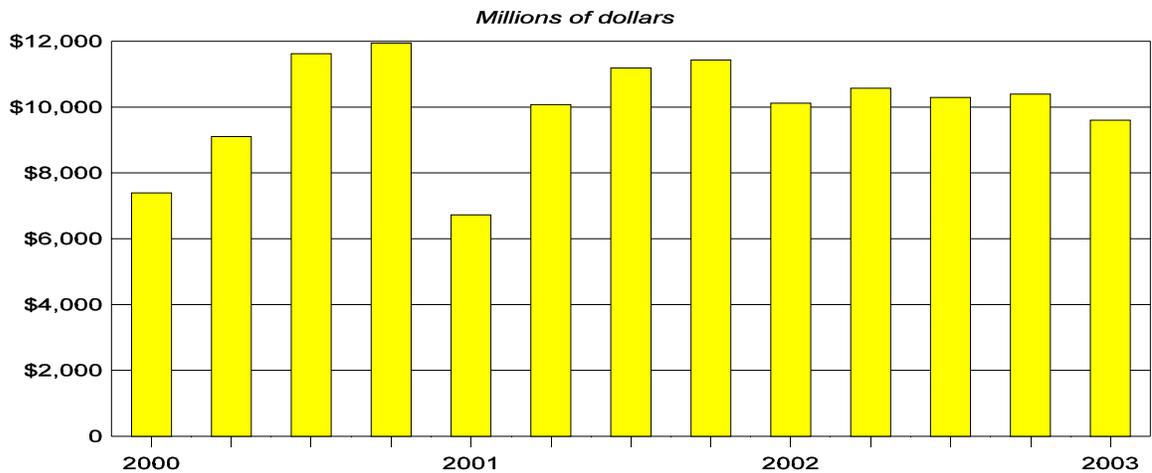


Source: U.S. Census Bureau, *C30 Report-Value of Construction Put in Place*.

Utilities, Pipelines, and Railroads

Figure OVERVIEW II-8

Utilities, pipelines, and railroads: Value of U.S. construction put in place, by quarters, January 2000-March 2003

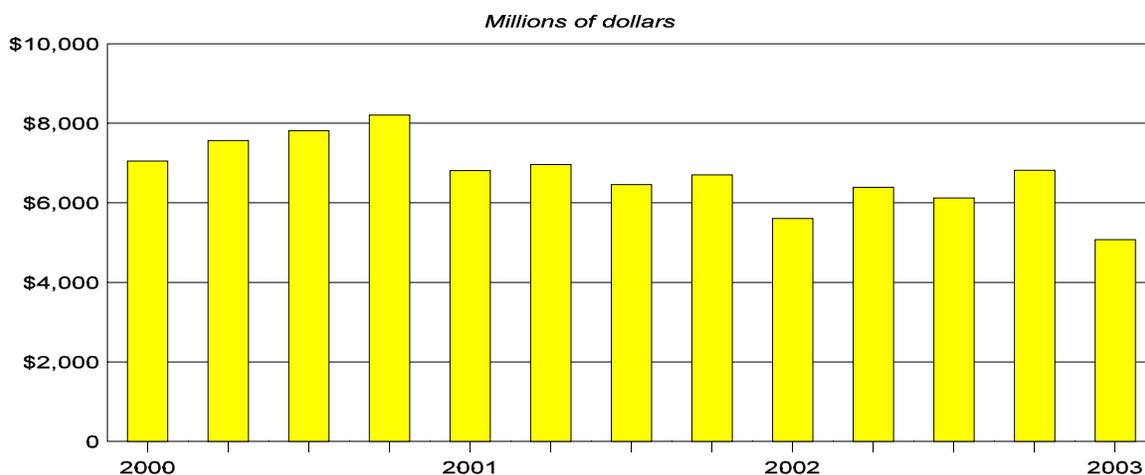


Source: U.S. Census Bureau, *C30 Report-Value of Construction Put in Place*.

Metalworking Machinery

Figure OVERVIEW II-9

Metalworking machinery: Value of U.S. manufacturers' shipments, by quarters, January 2000-March 2003



Source: U.S. Census Bureau, *M3 Series—Value of Manufacturers' shipments*.

INPUT COSTS

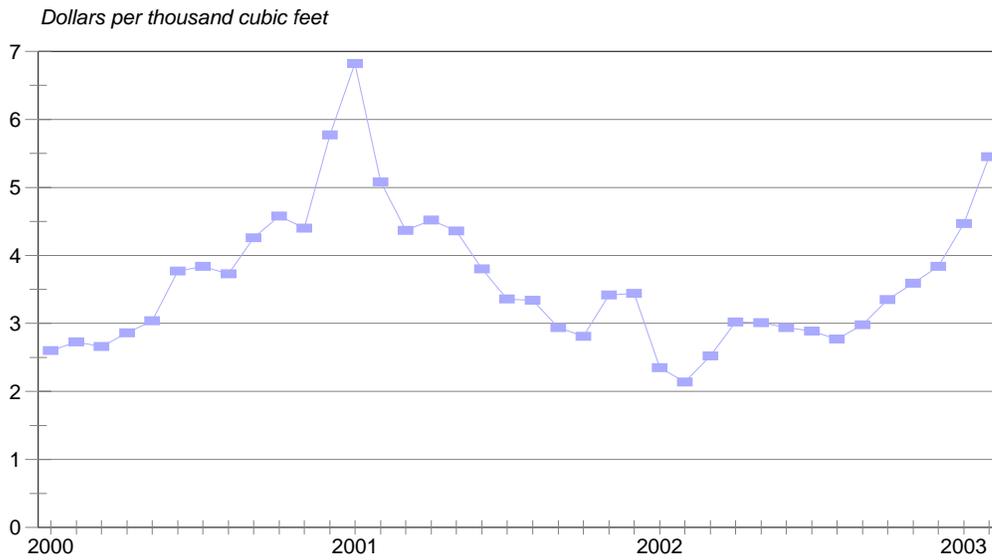
Primary input costs in the production of steel products include energy inputs such as natural gas and electricity, and raw materials inputs such as steel scrap, nickel,¹ and coke. Price series for these inputs are shown in figures OVERVIEW II-10-OVERVIEW II-14.

Prices for energy inputs, particularly natural gas, have increased since April 2002. Prices for natural gas showed wide swings during the period, increasing to a peak of \$6.82 per thousand cubic feet in January 2001, falling to a low point of \$2.14 per thousand cubic feet in February 2002, then increasing to \$5.45 per thousand cubic feet in February 2003. Since April 2002, prices for natural gas have increased sharply by 80.5 percent. Prices for electricity sold to industrial users fluctuated upward during the period. Since April 2002, electricity prices have increased slightly by 2.3 percent.

Prices for raw materials inputs also have increased since April 2002. Prices for steel scrap fell to a low point of \$63.94 per long ton in November 2001, then increased to a high point of \$118.52 per long ton in March 2003. Since April 2002, prices for steel scrap have increased by 30.8 percent. Prices for nickel fell steeply from a high point of \$10,280 per ton in March 2000 to a low point of \$4,825 per ton in October 2001, then increased to \$8,797 per ton in July 2003. Since April 2002, nickel prices have increased by 26.4 percent. Yearly prices for coke fell slightly in 2001, then increased by 16.6 percent during the rest of the period.

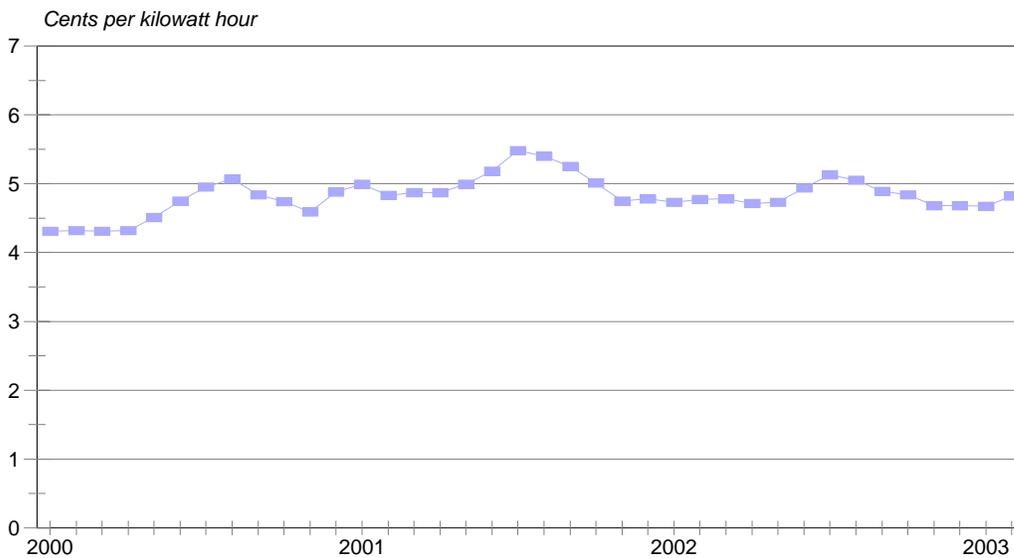
¹ Nickel is a major raw material input for making stainless steel and is reportedly priced globally for all manufacturers. One industry analyst testified that type 304 stainless steel has an eight percent nickel content, and estimated that, accounting for yield loss, for every 10 cents a pound increase in nickel cost, the cost of producing 304 stainless steel would increase by one cent per pound. *See* testimony of Ed Blot, President, Ed Blot and Associates, transcript of Commission hearing (July 7, 2003) at 50 and 97.

Figure OVERVIEW II-10
Natural gas: Monthly wellhead price of natural gas, January 2000-February 2003



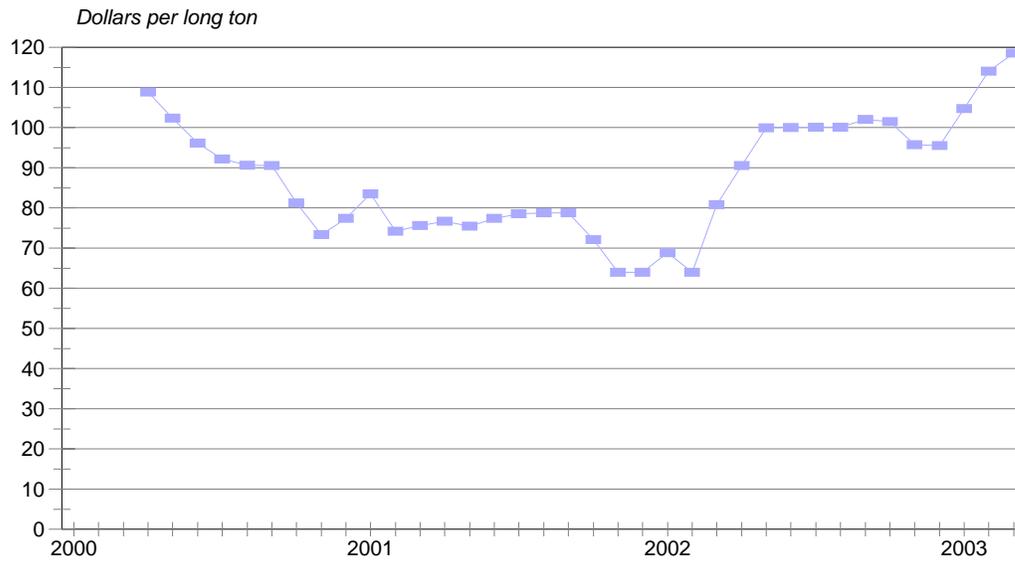
Source: Department of Energy, Energy Information Administration.

Figure OVERVIEW II-11
Electricity: Monthly prices of electricity sold to industrial customers, January 2000-February 2003



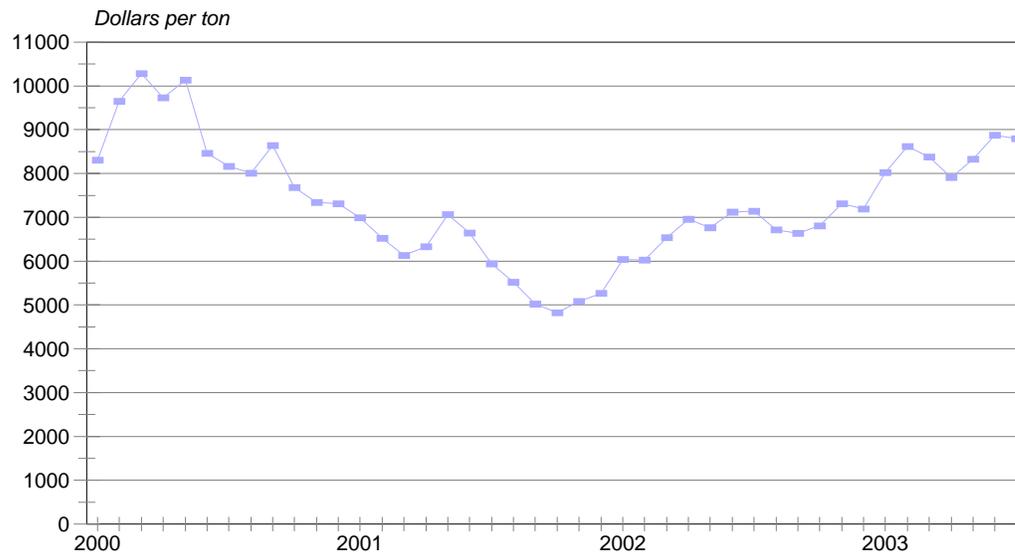
Source: Department of Energy, Energy Information Administration.

Figure OVERVIEW II-12
Steel scrap: Monthly prices of steel scrap, April 2000-March 2003



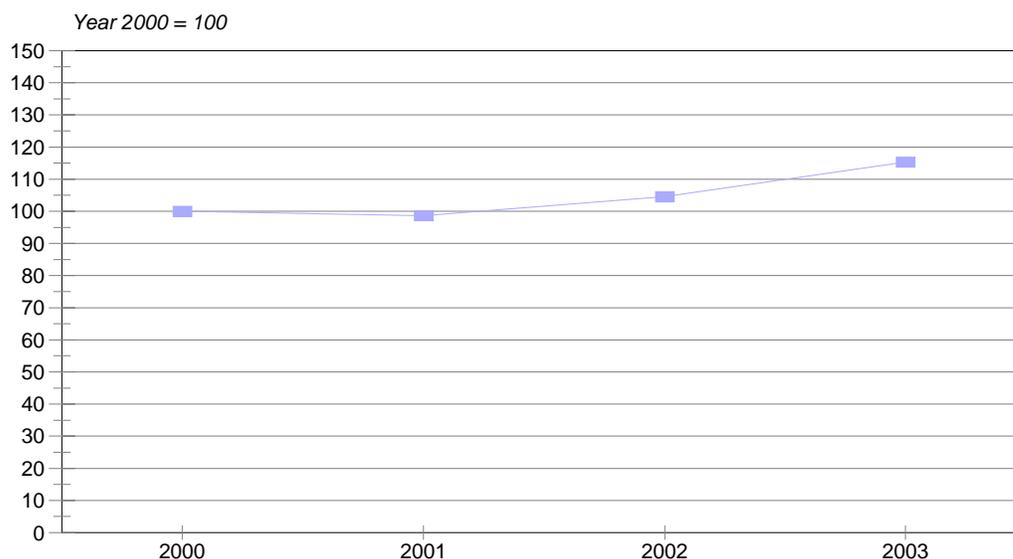
Source: American Metal Market.

Figure OVERVIEW II-13
Nickel: Monthly cash mean prices of nickel, January 2000-July 2003



Source: London Metal Market.

Figure OVERVIEW II-14
Coke: Yearly prices of coke, 2000-2003



Source: World Steel Dynamics, *Steel Strategist* No. 29.

EXCHANGE RATES

Exchange rate fluctuations between the U.S. dollar and foreign currencies can have a significant effect on the relative competitiveness of global steelmakers selling products in the U.S. market. As a country's currency depreciates against the U.S. dollar, the foreign producer can lower product prices expressed in U.S. dollars in the U.S. market while still receiving the same price expressed in its home currency. As shown in table OVERVIEW II-2, nominal exchange rates for most of the selected countries depreciated against the U.S. dollar, whereas real exchange rates were divided more evenly between appreciating and depreciating against the U.S. dollar.²

² One witness testified that exchange rates have "gone through the roof" and that there is now a differential between the U.S. dollar and the euro of about 30 percent, as much if not more than the remedy itself. Testimony of Gunter Von Conrad, counsel to the Association of Specialty Cold Rolled Strip Producers of Germany, transcript of Commission hearing (July 22, 2003) at 358. Another witness testified that there is much less reason now to be concerned about a flood of imports of carbon steel bar from Europe because the exchange rate has changed so significantly. Testimony of Richard Cunningham, counsel to the Corus Group, transcript of Commission hearing (July 24, 2003) at 332-333. In contrast, the welded pipe industry, for example, is quite concerned that a large undervaluation of the Chinese yuan has led to increased imports of finished goods, which has lowered demand for certain tubing. Testimony of Parry Katsafanas, President of Leavitt Tube Co., and Robert Bussiere, General Manager of Fire Protection Products of Allied Tube and Conduit Corporation, transcript of Commission hearing (July 17, 2003) at pages 88-89.

Table OVERVIEW II-2

Overall appreciation and depreciation amounts for currencies of selected countries relative to the U.S. dollar, April-June 2000 through January-March 2003

Country	Nominal exchange rate		Real exchange rate	
	Appreciation	Depreciation	Appreciation	Depreciation
	Percent	Percent	Percent	Percent
Argentina	–	67.9	–	34.7
Australia ¹	0.5	–	2.5	–
Brazil ¹	–	48.4	–	13.2
Canada	–	2.0	–	3.6
China ²	–	–	–	–
Czech Republic	31.8	–	30.0	–
Egypt	–	39.8	–	35.2
E.U. ¹	15.0	–	15.0	–
India ¹	–	7.7	–	1.5
Indonesia	–	6.9	11.0	–
Japan ¹	–	10.3	–	18.4
Korea ¹	–	7.2	–	9.8
Mexico	–	11.6	–	0.1
Romania ¹	–	38.5	26.6	–
Russia ¹	–	10.3	29.8	–
Thailand ¹	–	9.7	–	6.1
Turkey ¹	–	63.0	7.3	–
United Kingdom ¹	4.5	–	1.6	–

¹ Covered countries. Certain carbon flat-rolled steel are the only covered products from Brazil. Fittings are the only covered products from India, Romania, and Thailand. Rebar are the only covered products from Turkey.

² China's currency (yuan) is pegged to the U.S. dollar, so it neither appreciated or depreciated nominally. Chinese producer price indexes are not available, so real exchange rates could not be calculated.

Source: International Monetary Fund, *International Financial Statistics*, August 2003, March 2003, and December 2002, and <http://imfstatistics.org>.

PART III: U.S. DEVELOPMENTS (1999-2002)¹

U.S. PRODUCERS

A list of U.S. producers that responded to the Commission's request for information, including the products produced by each firm, is presented in table OVERVIEW III-1.

Table OVERVIEW III-1

Steel: U.S. producers, by products, April 2000-March 2003

* * * * *

FINANCIAL AND INVESTMENT TRENDS

The production of most steel products included in this investigation is a highly capital-intensive undertaking. Companies require regular infusions of capital both for new equipment and regular maintenance and upkeep of existing capital stock. The sources of such investment have traditionally been retained earnings, debt, and equity. All of these avenues have been constrained for more than a decade. Since 1999, the market value of the stocks of steel companies in the United States has been in decline. Figure OVERVIEW III-1 shows the performance of the World Steel Dynamics (WSD) major mill and minimill stock indices, which it began tracking in 1997. Stock prices of both groups, which are indicators of past or expected future financial performance, have declined significantly since that time, inhibiting companies' ability to raise money in equity markets.

Only a few U.S. steel companies are in a position to raise capital or refinance their existing debt through issuance of unsecured bonds. Table OVERVIEW III-2 shows the history of the ratings of the senior debt of representative steel companies since 1999, as rated by Moody's Investment Service.

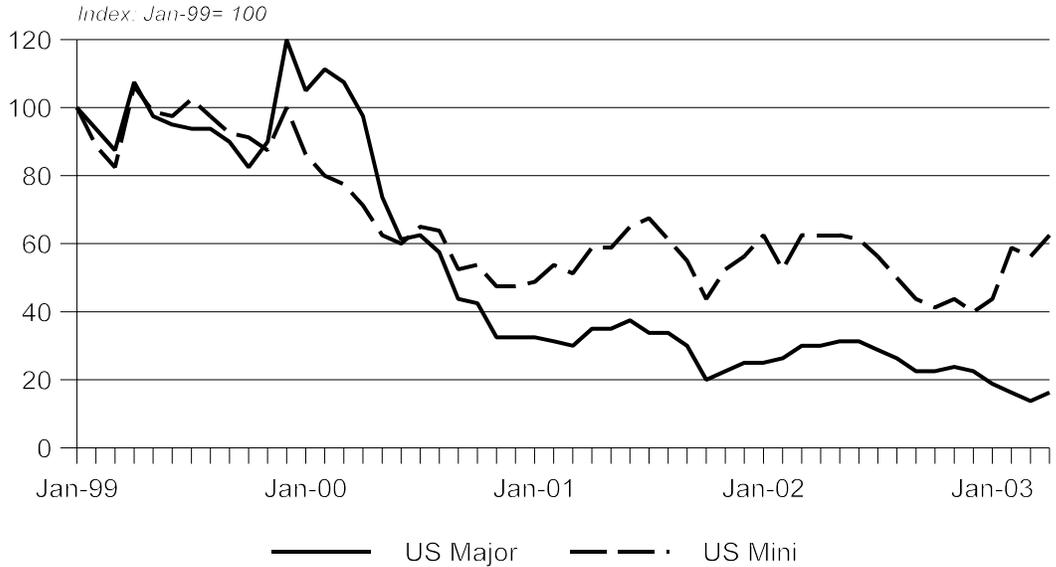
The senior debt² of only four U.S. steel companies is rated "investment grade."³ The debt of the rest of the companies is rated lower than investment grade or not rated at all, limiting companies' access to capital markets. Moreover, since 1999, the debt ratings of steel companies have been repeatedly lowered as companies have had difficulty earning a return on their invested capital.

¹ This section is based on information presented in the Commission's section 201 steel report, and has been updated to reflect changes since 2001. *See, Steel*, Inv. No. TA-201-73, USITC Pub. 3479, December 2001.

² Subordinated debt, such as debentures, has historically been rated lower than senior debt. Senior debt is a class of securities, bonds, notes, or shares that has preference in instances of company liquidation over another class.

³ The four companies are Allegheny Technologies Inc. (which does not produce products subject to this 204 investigation), Carpenter Technology Corp., Commercial Metals Co. (CMC), and Nucor Corp. The senior debt of U.S. Steel Corp. is no longer rated investment grade following its spinoff from USX Corporation.

Figure OVERVIEW III-1
World Steel Dynamics' index of steel stock prices, U.S. major mills and U.S. minimills, by months, January 1999-March 2003



Note--Major mills include AK, Bethlehem, Ispat-Inland, LTV, National, Rouge, U.S. Steel, Weirton, and WHX. Minimills include Bayou, Birmingham, Commercial Metals, Keystone, Nucor, Oregon, and Steel Dynamics.

Source: World Steel Dynamics.

Table OVERVIEW III-2

Moody's ratings¹ of senior unsecured debt of selected² U.S. steel producers, 1999-2003

Company					
	1999	2000	2001	2002	2003
AK Steel			↓↓Ba3		Ba3
Bethlehem ³		↓↓B2	↓↓Caa1 ↓↓Ca		
Carpenter Technology		↓↓Baa1		↓↓Baa3	Baa3
Commercial Metals					Baa1
Geneva ⁴	↓↓Ca ↓↓C	WR			
Northwestern Steel and Wire ⁵	↓↓Caa1 ↓↓Ca		WR		
Nucor					A1
Weirton			↓↓Caa3 ↓↓Ca		Ca
Wheeling-Pittsburgh ⁶		↓↓B3 ↓↓Caa3	↓↓C WR		

¹ Moody's ratings range from Aaa (highest) to C (lowest). Ratings of Baa and higher are considered "investment grade." The numerical modifiers run from 1 (highest) to 3 (lowest). WR indicates "withdrawn rating" an action which usually occurs upon the bankruptcy of the rated firm.

² Moody's did not provide histories for all rated steel companies.

³ Bethlehem entered bankruptcy in October 2000 and was acquired by International Steel Group in May 2003.

⁴ Geneva was under bankruptcy protection from February 1999 to December 2000 then shut down operations in November 2001, and reentered bankruptcy in January 2002. The company's parent entered bankruptcy in September 2002.

⁵ Northwestern Steel and Wire ceased operations in May 2001.

⁶ Wheeling-Pittsburgh entered bankruptcy protection in November 2000 and exited August 2003.

Source: Moody's Investor's Service.

Bankruptcies

Since January 1999, 31 steel companies producing products subject to the steel safeguard measures sought the protection of the bankruptcy courts because of their lack of resources. Seven of those bankruptcy filings occurred after the implementation of the safeguard measures. Most of these companies continued to operate while they developed reorganization plans to restructure their debts, but several were forced to liquidate their assets. Many of the companies that have been forced into bankruptcies are those that invested during the 1990s with the plan of improving their capabilities. Information on U.S. steel producers that have filed for bankruptcy since April 2000 is presented in tables FLAT I-3, LONG I-3, TUBULAR I-3, and STAINLESS I-3 that are presented in Part I of subsequent chapters of this report.

Mergers and Acquisitions

Since the implementation of the steel safeguard measures, there have been a number of instances of firms acquiring the assets of bankrupt steel companies and consolidating them into larger steel companies. This has included both large integrated companies as well as large minimill companies. Specifically, International Steel Group acquired the steelmaking assets of LTV Steel, Acme Metals, and Bethlehem Steel; U.S. Steel acquired the assets of National Steel; and Nucor acquired the assets of Trico Steel and Birmingham Steel. In another major merger event, not involving bankrupt entities, Ameristeel (the North American operations of Gerdau S.A. of Brazil) merged with Co-Steel Inc. of Canada to form Gerdau Ameristeel, which operates a total of 11 minimills in the United States and Canada. Information on recent steel company mergers and acquisitions is presented in tables FLAT I-4, LONG I-4, TUBULAR I-4, and STAINLESS I-4 that are presented in Part I of subsequent chapters of this report.

Capital Investments

The U.S. steel industry has invested much of its available capital to investments intended both to expand total capacity and to improve product mix by expanding capacity to produce higher value-added products. Information on recent, major capital investments of U.S. steel companies is presented in tables FLAT I-5, LONG I-5, TUBULAR I-5, and STAINLESS I-5 that are presented in Part I of subsequent chapters of this report.

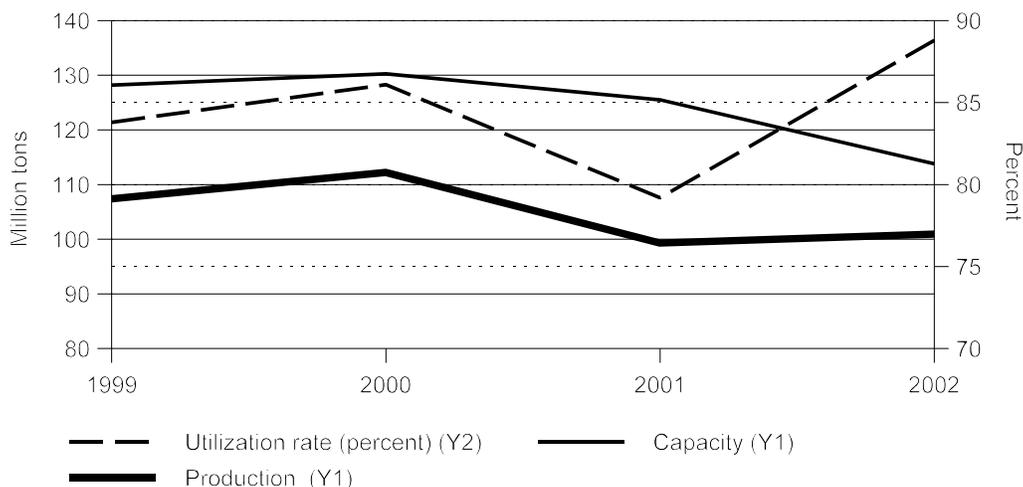
CAPACITY, PRODUCTION, SHIPMENTS, AND INVENTORIES

The United States was the third-largest steel producer in the world in 2002, producing 101 million tons of raw steel (10 percent of the world total raw steel output), a 6-percent decline from the 1999 level of 107 million tons and down from a peak of 112 million tons in 2000 (figure OVERVIEW III-2).⁴ Indiana leads all states in steel production, followed by Ohio.⁵

⁴ American Iron and Steel Institute (AISI), *Annual Statistical Report-2002*, p. 4. China and Japan are the largest and second largest global steel producers, respectively. *Ibid.*, pp. 128-130.

⁵ *Ibid.*

Figure OVERVIEW III-2
U.S. raw steel production, capacity, and utilization rate, 1999-2002



Source: AISI, *Annual Statistical Report*, 2002.

During 1999-2002, total domestic raw steel capacity decreased from 128 million tons to slightly less than 114 million tons, a reduction of about 11 percent. Although capacity fell in 2001, production fell by a larger degree, resulting in a further decrease in capacity utilization to 79.2 percent in 2001. However, this declining trend was reversed in 2002 as a result of many plant closings while production increased slightly, raising the utilization rate to 88.8 percent in that year.

Production in electric arc furnaces has mirrored the trend in total raw steel production during 1999-2002 (figure OVERVIEW III-3). Basic oxygen furnace method production as a share of total production has declined from almost 54 percent in 1999 to slightly less than 50 percent in 2002, with electric arc process production becoming the leading source of raw steel production in the United States.

During 1999-2002, total net shipments⁶ of steel as reported by AISI decreased by about 6 million tons, or almost 6 percent,⁷ while imports of finished steel declined by 3 million tons, or by 12 percent⁸ (figure OVERVIEW III-4). The share of apparent consumption accounted for by finished steel imports ranged from 20 to 22 percent during the period.⁹ By contrast, U.S. exports remained at a low level, rising from 5 million tons, peaking at almost 7 million tons in 2000, and then remaining at approximately 6 million tons during 2001-2002.

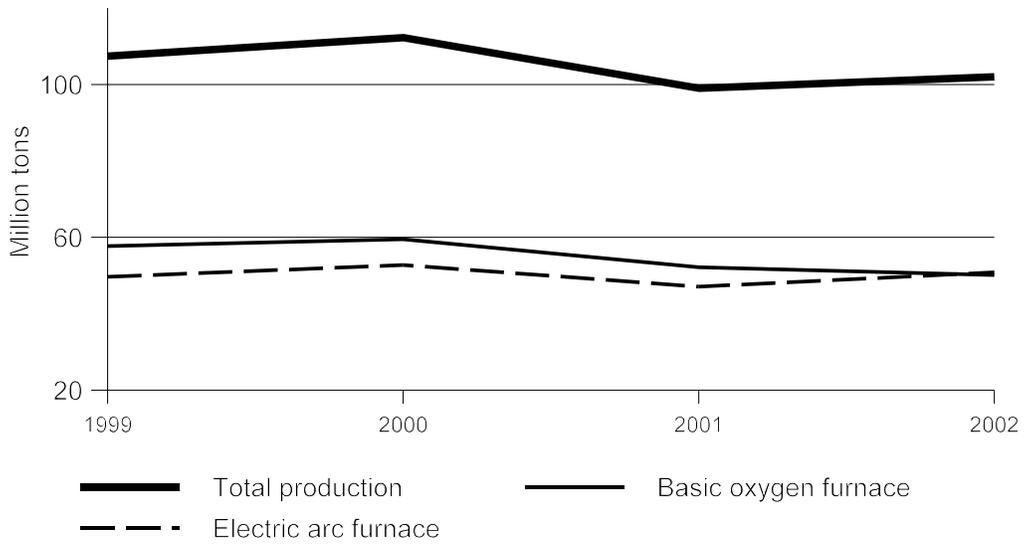
⁶ The data shown in this figure depict general trends for the overall U.S. steel industry and are presented for illustrative purposes.

⁷ U.S. net total steel shipments rose from 106 million tons in 1999 to 109 million tons in 2000, before declining to 100 million tons during 1999-2002. See AISI, *Annual Statistical Report-2002*, p. 4.

⁸ U.S. imports of finished steel rose from 27 million tons in 1999 to 29 million tons in 2000, before declining to 24 million tons in 2001 and remaining at that level in 2002. See AISI, *Annual Statistical Report-2002*, p. 4.

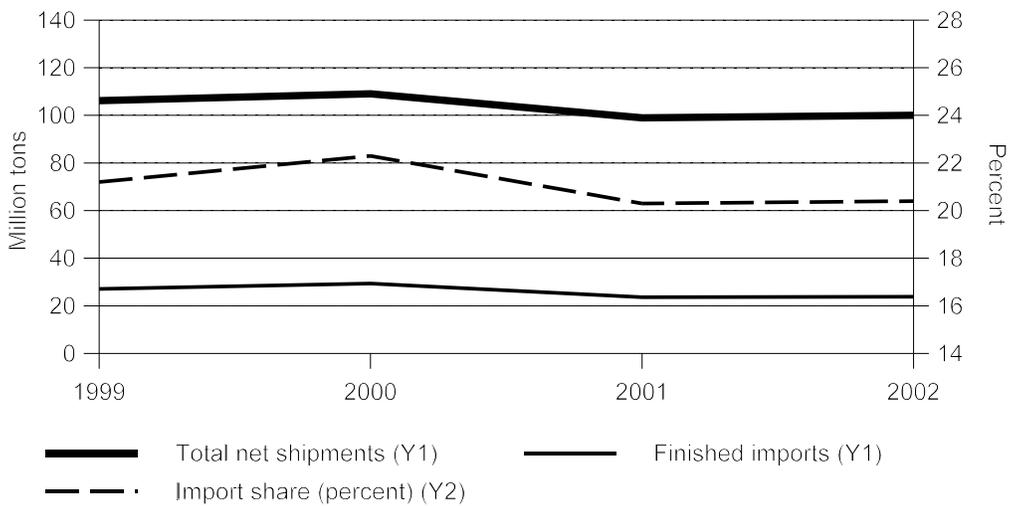
⁹ Ibid.

Figure OVERVIEW III-3
Annual U.S. raw steel production, by processes, 1999-2002



Source: AISI, *Annual Statistical Report*, 2002.

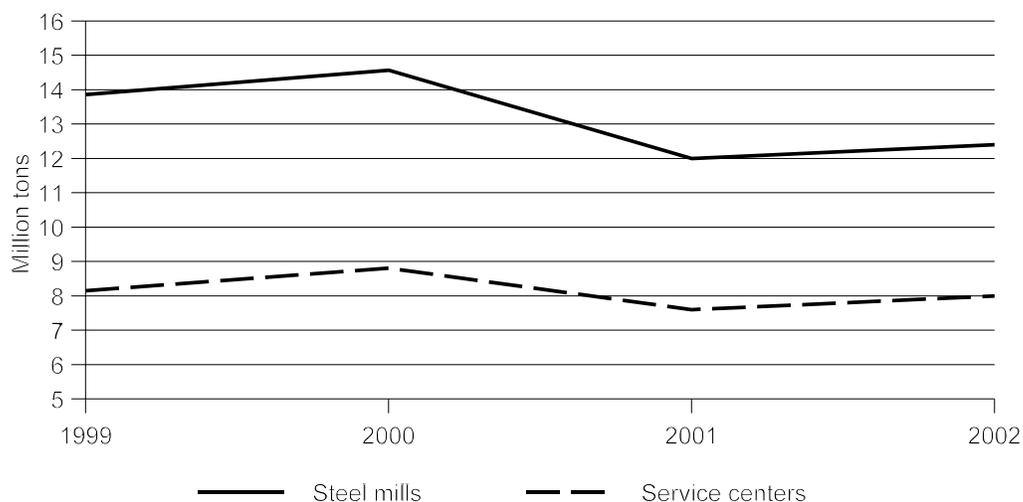
Figure OVERVIEW III-4
Steel: Total net shipments, imports, and finished import share of apparent U.S. consumption, 1999-2002



Source: AISI, *Annual Statistical Report*, 2002.

Steel inventories are held by numerous market participants, including producers, end users, importers, and service centers. Public data on inventory holdings are available only for those inventories held in storage at steel mills or at service centers. As shown in figure OVERVIEW III-5, the quarterly average inventories held by these two sources peaked in 2000.¹⁰ In 2001, the inventory levels held decreased substantially (for steel mills, to the lowest level since 1991) before recovering only slightly in 2002.

Figure OVERVIEW III-5
Steel: U.S. inventory levels based on quarterly averages, 1999-2002



Source: U.S. Department of Commerce, *Current Industrial Reports*, various years.

EMPLOYMENT AND PRODUCTIVITY

The trend in employment for durable goods manufacturing, basic steel products, and blast furnace and steel mills all followed a declining path from 1999 to 2002 (table OVERVIEW III-3). The value of durable goods production, on a monthly basis, peaked in June 2000, and fell by almost 13 percent by December 2002.¹¹ The United States was in a recession from March 2001 to November 2001.¹²

¹⁰ As noted above, the products included in these data do not exactly match the scope of the investigation.

¹¹ U.S. Census Bureau, *Manufacturers' Shipments, Inventories, and Orders (M3) Survey* data found at <http://www.census.gov/indicator/www/m3/hist/m3bendoc.htm>.

¹² National Bureau of Economic Research, "Business Cycle Dating Committee, National Bureau of Economic Research," found at <http://www.nber.org/cycles/july2003.html>, retrieved August 26, 2003.

Table OVERVIEW III-3

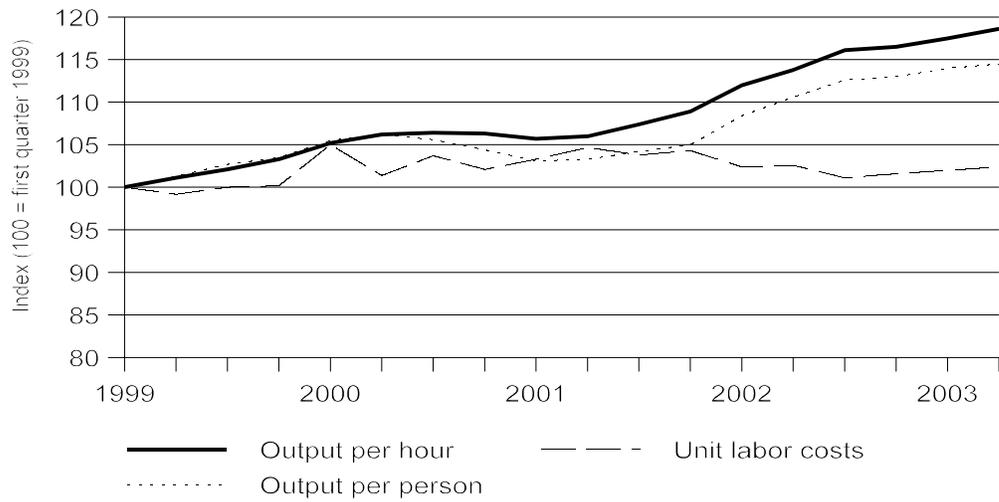
Employment: All manufacturing, basic steel products, and blast furnaces and steel mills, 1999-2002

Standard industrial Classification (SIC) code	Industry	Employment				Change	
		1999	2000	2001	2002		
		1,000 workers				Number	Percent
24-39	Durable goods manufacturing	11,111	11,141	10,636	9,906	-1,205	-11
331	Basic steel products ¹	227	224	209	188	-40	-17
3312	Blast furnaces and steel mills ²	154	151	140	124	-29	-19
<p>¹ Includes blast furnaces, steel mills, and manufacturers of basic steel products produced from purchased steel (for example, certain pipe and wire manufacturers).</p> <p>² SIC 3312, Steel Works, Blast Furnaces (including Coke Ovens), and Rolling Mills, is a subset of SIC industry grouping 331. SIC 3312 covers products made at steel works and blast furnaces (includes (EAFs)), coke ovens including those not integrated with steel mills, and hot rolling of purchased steel.</p> <p>Note.—Calculations are made from unrounded figures.</p> <p>Source: Source: Bureau of Labor Statistics, <i>Current Employment Survey</i>.</p>							

Productivity in the U.S. durable goods manufacturing industry has risen substantially during 1999-2003 (figure OVERVIEW III-6). The index of output per hour in durable goods manufacturing and output per person have risen substantially, while unit labor costs have remained almost flat.

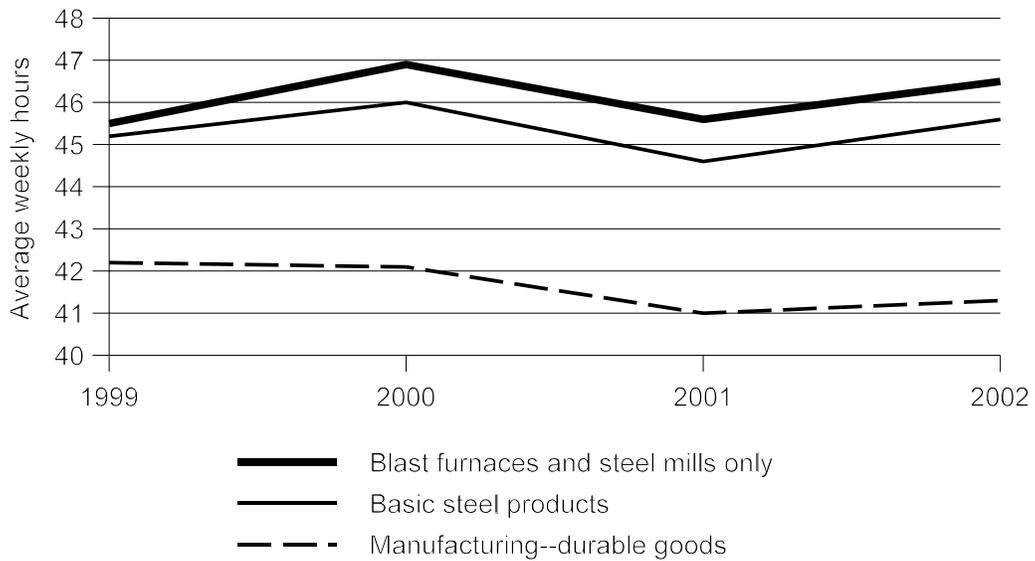
The trends in average hours worked, including overtime, for production workers for durable goods manufacturing and the steel industry were similar during 1999-2002, except between 1999 and 2000, when the trend in durable goods manufacturing was flat (figure OVERVIEW III-7). Individual production workers in the blast furnace and steel mills industry worked an average of 46 to 47 hours per week, compared with the average of 41 to 42 hours per week for workers in durable goods manufacturing during 1999-2002. This gap was particularly large in 2002, and was likely attributable to U.S. steel producers increasing steel production in 2002 with fewer workers, particularly since U.S. steel industry employment had been declining. During 1999-2002, average weekly overtime hours in durable goods manufacturing declined from almost 5 hours in 1999 and 2000 to about 4 hours in 2001 and 2002, compared with almost 7 hours in 1999 and 2001-2002 and 8 hours in 2000 for steel and blast furnace production.

Figure OVERVIEW III-6
U.S. Durable goods manufacturing: Selected productivity measures, quarterly, 1999-
second quarter 2003



Source: U.S. Bureau of Labor Statistics.

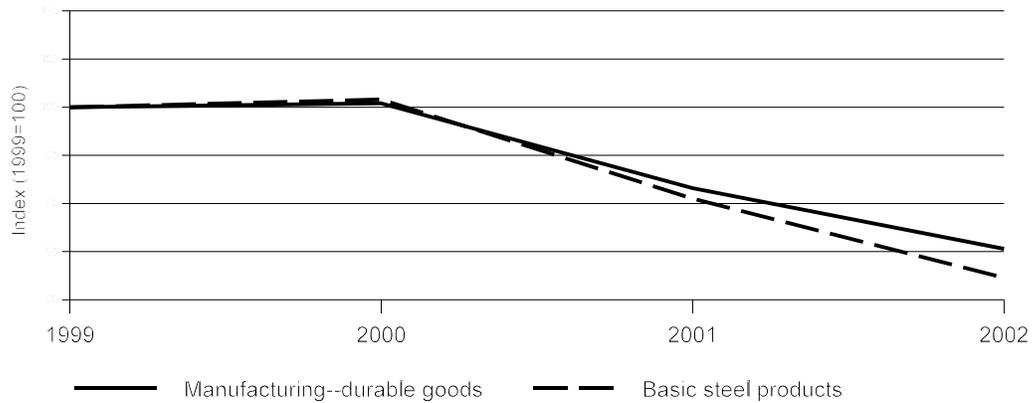
Figure OVERVIEW III-7
Average weekly hours, including overtime hours, of individual production workers: Durable goods
manufacturing, basic steel products, and blast furnaces and steel mills only, 1999-2002



Source: Bureau of Labor Statistics, *Current Employment Survey*.

Indexes of aggregate hours worked for durable goods manufacturing and basic steel products generally show a flat trend between 1999 and 2000, before falling in 2002 (figure OVERVIEW III-8). The large decrease in the index of aggregate hours worked for basic steel products reflects significant employment declines in the steel industry during 1999-2002.

Figure OVERVIEW III-8
Indexes of aggregate weekly hours: Durable goods manufacturing and basic steel products, 1999-2002



Not

e.—1999=100. These indexes compare annual aggregate weekly hours (including overtime) for each industry segment during 1999-2002 with aggregate weekly hours for that same industry segment in 1999.

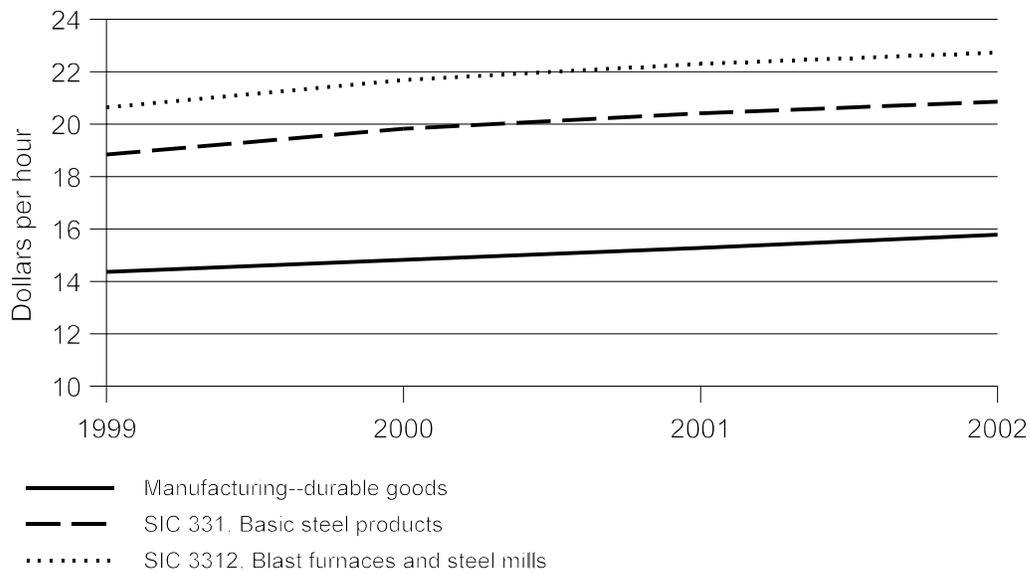
“Basic products” includes blast furnaces, steel mills, and manufacturers of basic steel products produced from purchased steel (for example, certain pipe and wire manufacturers).

Source: Bureau of Labor Statistics, *Current Employment Survey*.

Average hourly earnings of production workers in both durable goods manufacturing and the steel industry rose continually during 1999-2002 (figure OVERVIEW III-9). Average hourly earnings of production workers in the steel industry were significantly higher than such earnings in the durable goods manufacturing industry. Average hourly earnings are influenced not only by changes in normal wage rates but also by overtime pay and occupational shifts within an industry sector. Therefore, trends in average hourly earnings may not reflect changes in base pay.

Figure OVERVIEW III-9

Average hourly earnings of production workers: All manufacturing and basic steel products, and blast furnaces and steel mills, 1999-2002



“Basic products” includes blast furnaces, steel mills, and manufacturers of basic steel products produced from purchased steel (for example, certain pipe and wire manufacturers).

Source: Bureau of Labor Statistics, *Current Employment Survey*.

PENSIONS AND POST-EMPLOYMENT BENEFITS OTHER THAN PENSIONS

Retirement benefits (pensions) and other post-employment benefit (OPEB) plans, which are chiefly health, medical care, and life insurance benefits, cover specified groups of company employees, and are included in contractual arrangements between a company and its workers. For the domestic steel industry, these arrangements and their associated costs and liabilities generally stem from contract negotiations during the 1970s and 1980s, and are considered to be among the largest legacy costs (primarily pension benefit and retiree healthcare costs) of the industry.¹³ Many of the companies funded only current expenses, leaving the potential liabilities not fully funded, or funded their pension plans only to the minimum extent they were required to do so by Federal law, and most companies that had gone into bankruptcy proceedings (see discussion on bankruptcies) terminated underfunded pension and OPEB plans. Since 2000, the Pension Benefit Guaranty Corporation (PBGC), a U.S. Government agency,¹⁴ has terminated and taken over the pension plans of 11 U.S. steel producers of steel subject to the steel safeguard measures (table OVERVIEW III-4).¹⁵

¹³ For a discussion of some of the retirement benefits and related costs, see John P. Hoerr, *And the Wolf Finally Came* (University of Pittsburgh Press: 1988), pp. 78-80, and 512. See also the benefit calculations included in pension and OPEB plans that a number of companies attached to their questionnaire responses. See Steel, investigation No. TA-201-73, USITC Pub. 3479 (December 2001), p. OVERVIEW-31.

¹⁴ The Pension Benefit Guaranty Corporation (PBGC) was established in 1974 by the Employee Retirement Income Security Act (ERISA) to protect employee pension benefits when a defined-benefit pension plan is terminated because of bankruptcy or for another reason. After a plan is terminated, PBGC becomes trustee of the plan and guarantees some benefits, the amount of which may differ from the original sponsor's plan.

¹⁵ Other companies producing steel products other than those covered by the safeguard measures and also processing steel, or engaged in steel related activities, also have had pensions taken over by the PBGC, including LTV Railroads, EvTac (iron ore mining), Edgewater Steel Ltd., and Freedom Forge Corp.

Table OVERVIEW III-4

Subject steel: Steel company pension plans taken over by the PBGC¹

Date of PBGC takeover	Date of bankruptcy filing	Company	Persons covered²	Under-funding level²	Company status
			<i>Number</i>	<i>Million dollars</i>	
December 2002	October 2001	Bethlehem Steel	95,000	4,300.0	Acquired by ISG in May 2003
December 2002	March 2002	Calumet Steel Co.	520	1.2	Ceased operations in March 2002
December 2002	March 2002	National Steel Corp.	35,000	1,500.0	Acquired by U.S. Steel in May 2003
November 2002	January 2002	Geneva Steel	(³)	20.0	Ceased operations in December 2001
August 2002	September 1998	Acme Metals, Inc.	3,800	170.0	Ceased operations October 2001, assets acquired by ISG in October 2002
August 2002	February 2001	GS Industries (Kansas City, MO facility)	1,000	44.0	Kansas City, Mo facility permanently closed
June 2002	April 2001	Republic Technologies International	6,200	310.0	Certain assets acquired by Republic Engineered Products in August 2002
March 2002	December 2000	LTV Corp.	82,000	2,200.0	Ceased operations December 2001, assets acquired by ISG in April 2002; restarted in May and June 2002
March 2002	January 2001	CSC Ltd.	1,000	56.0	Ceased operations in April 2001
September 2001	December 2000	Northwestern Steel and Wire	4,600	160.0	Ceased operations May 2001, assets acquired by Leggett & Platt July 2002
August 2001	June 2001	Empire Specialty Steel, Inc.	2,500	0.5	Ceased operations December 2001, assets acquired by State of New York and later sold to Universal Stainless in February 2002
January 2001	July 2001 and November 1998	Laclede Steel Co.	4,000	106.0	Ceased operations August 2001, acquired by Alton Steel in January 2003.

¹ See <http://www.pbgc.gov/plans> for each company; see also, http://www.pbgc.gov/news/press_releases for 2000-02.

² The level of underfunding is usually greater than the PBGC's liability for the plan because the amount the agency may pay to retirees is subject to limitations. Also, the number of retirees is usually smaller than the number of plan participants, which includes both retirees and active workers. For example, the PBGC's estimated liability for Bethlehem Steel was \$3.7 billion, for National Steel, \$1.1 billion, and for LTV Corp., \$1.9 billion. Bethlehem Steel's pension plan covered 67,000 retirees out of 95,000 persons in the plan, and LTV Corp.'s pension plan covered 53,000 retirees out of 82,000 persons in the plan.

³ Not available.

Source: Pension Benefit Guaranty Corporation; company status from various industry publications.

The PBGC withdrew its motion to terminate and take over the pension plan of bankrupt WHX Corporation in March 2003.¹⁶ WHX's pension plan covered employees of Wheeling-Pittsburgh Steel and Handy & Harman. Wheeling-Pittsburgh was granted a loan guarantee under the Emergency Loan Guarantee Program (which provides loan guarantees to steel producers) in March 2003, the firm's reorganization plan was approved by the bankruptcy court in June 2003, and it emerged from bankruptcy in August 2003. Employees in Wheeling-Pittsburgh's existing pension plan reportedly have not lost benefits;¹⁷ the labor agreement was structured similarly to the agreement between the USWA and ISG.¹⁸

Pension cost and the liability associated with pensions and OPEBs are reported under applicable accounting and reporting standards (GAAP). Public companies have to adhere to certain standards of reporting current and noncurrent pension and other benefits expenses and liabilities. The accrual accounting for pensions and OPEBs is complex, but the two key elements are the net periodic cost or benefit (shown on the income statement), and the pension liability (shown on the balance sheet).¹⁹

Data covering sales revenue, operating income, costs, and funding status related to steel company²⁰ post-employment obligations were compiled from those companies' annual public reports on their Form 10-K to the Securities and Exchange Commission (SEC) (table OVERVIEW III-5). Although the majority of the 27 companies surveyed have defined benefit plans,²¹ others have only defined contribution plans,²² and several of those companies that sponsored defined benefit plans also sponsored

¹⁶ Official of Pension Benefit Guarantee Corp., telephone interview with Commission staff, August 27, 2003.

¹⁷ Ibid.

¹⁸ USWA press release of July 30, 2003, "Steelworkers at Wheeling-Pitt Approve 5-year Agreement," retrieved at http://www.uswa.org/press/0730003_Steelworkers_At_Wheeling_Pitt_Approve.htm on September 4, 2003.

¹⁹ See Financial Accounting Standards Board (FASB) Statements of Financial Accounting Standards (SFAS) numbers 87, 88, and 106.

²⁰ In the section 201 investigation, companies surveyed in this section were compiled from lists of companies responding to recent investigations of flat-rolled, long, and specialty steel products. Because the data of several of those companies are not available or available only to a limited extent (chiefly because they ceased reporting after filing for bankruptcy), the database was modified to omit non-reporting companies and expanded to include additional firms, drawing from the SEC's list of reporting companies classified in SIC 3312.

²¹ Under a defined benefit plan the employer agrees to provide a benefit at retirement that is fixed by a formula. Because the benefits are defined, the employer accepts the risk associated with changes in the variables that determine the amounts needed to meet the obligation to plan participants. Most noncontributory defined benefit plans have pensions that are based on final pay and years of service. The companies in this compilation that have defined benefit plans are: AK Steel, Ameristeel, Bethlehem, Carpenter Technology, ISPAT-Inland, Keystone, Lone Star, National, Oregon, Republic Technologies, Roanoke, Rouge, RyersonTull, Sheffield, Timken, USS, WCI, Weirton, and WHX (Wheeling-Pittsburgh). The majority of these companies are integrated steelmakers.

²² Under a defined contribution plan the employer agrees to make a defined contribution to a pension plan as determined by the provisions of the plan. Consequently, plan participants will receive at retirement whatever benefits the contributions can provide. The accounting is relatively straight-forward: each year the employer records an expense for the contribution. The companies that have defined contribution plans are: Birmingham, CSI, Commercial Metals (parent of Structural Metals Inc.), NS Group, Nucor, Steel Dynamics, TXI (Texas Industries), and Universal Stainless. A defined contribution plan is not guaranteed by the U.S. Government, unlike a defined benefit plan. All of these companies produce steel in an electric arc furnace.

Table OVERVIEW III-5

Salient post-employment benefit data of selected steelmakers, fiscal years 2000-2002

Item	Fiscal years		
	2000	2001	2002
	Value (million dollars)		
Defined benefit plans:			
Total net commercial sales	34,474	31,307	33,056
Operating income or (loss)	105	(2,584)	(1,501)
Total assets	38,300	35,596	34,670
Post-employment pension benefits:			
Net periodic cost or (benefit)	394	806	926
Funded status—fund assets (less than)/ greater than benefit obligation	2,288	(2,962)	(8,007)
Post-employment benefits other than pensions:			
Net periodic cost (benefit)	730	837	1,103
Funded status—fund assets (less than)/ greater than benefit obligation	(8,777)	(10,452)	(11,906)
Defined contribution plans:			
Total net commercial sales	11,173	10,086	10,989
Operating income	907	333	638
Total assets	9,748	9,419	9,905
Net pension plan expense	127	80	103
Net OPEB expense	10	2	8
<p>Note—Republic and Sheffield are included for 2000 and 2001 only. WHX reported OPEB only (the PBGC assumed the firm's pension plans).</p> <p>Source: Compiled from data reported in company form 10-K reports filed with the SEC.</p>			

small contribution plans. The data reflect amendments to post-employment benefit plans and the initiation or termination of plans.²³

Between fiscal year 2000 and fiscal 2002, the combined net periodic expense increased from a cost of \$394 million to \$926 million for the companies with defined benefit plans and decreased from a cost of \$127 million to \$103 million for the companies with defined contribution plans. Net periodic pension expense is reported in a company's cost of goods sold (stemming from overhead in the determination of product costs), in its current period income statement, and is included in the cost of product inventories in the company's balance sheet. Pension expense in defined benefit plans is not simply the amount by which the company currently funds its plan obligations; instead, pension expense is a net amount calculated by adding together five components.²⁴ The calculation may result in a benefit (i.e., income) and a reduction to cost of goods sold. AK Steel reported such a benefit in 2000 while Carpenter Technology, Keystone, and USS reported a benefit in each of the 3 years, 2000-2002, but the net periodic cost of the combined companies outweighed the benefit amounts these companies reported. In the same 3 years, Bethlehem Steel recorded net pension costs of \$55 million, \$103 million, and \$150

²³ For example, Lone Star amended its plans so that new employees (hired after 1996 in the case of the largest plan and after 1998 in the case of two other plans) do not participate in the defined benefit plans. WCI instituted a defined pension plan in 1995. Commercial Metals terminated its defined benefit plan in 1997 (the plan was settled in 1998), and instituted a discretionary contribution profit sharing or savings plans (company contributions were \$18 million in 2000).

²⁴ The annual funding of the pension or other post-employment benefit plan increases the amount of the fund's assets, but the amount is not used in the calculation of current pension cost. Net periodic pension cost is based on actuarial assumptions calculated using the following components: (1) service cost; plus (2) interest on the projected benefit obligation; minus (3) the expected return on plan assets; plus (4) amortization of unrecognized prior service cost (or minus amortization of prior service benefit); and plus (5) the effect of gains and losses that result from experience being different from that assumed, or from a change in an actuarial assumption. Gains or losses result in changes in plan assumptions; changes in the amount of plan assets; and changes in the amount of the projected benefit obligation; the net gain or loss component includes the portion of the unrecognized net gain or loss from previous periods that exceeds the greater of 10 percent of the beginning balance of the market-related value of plan assets or the projected benefit obligation, amortized over the average service life of active employees expected to receive benefits, and the difference between the expected return and actual return on plan assets.

On the other hand, defined contribution plans (which often take the form of 401(k) plans) are established to allow plan participants to contribute a percentage of their compensation, not to exceed statutory limits, and often provide for discretionary matching by the company of the participant's contribution. Participants are usually vested in full to the amount of their own contribution, but must meet length of service requirements to become fully vested in the company's contribution. The net current cost under a defined contribution plan is the company's actual payment.

million, respectively.²⁵ ²⁶ The combined companies' net current cost is relatively small in relation to total net commercial sales of the defined-benefit companies, but is large in relation to those companies' combined operating income in 2000 and worsens the companies' combined operating losses in 2001 and 2002. The net current cost of the defined-contribution companies was small in relation to the combined net sales and operating incomes during 2000-02.

Data showing the funding status for their defined benefit plans also are presented in table OVERVIEW III-4. The amounts shown as funded (an asset) or unfunded (a liability shown in parentheses) represent the difference between the combined companies' actuarial present value of plan obligations and fair value of plan assets at the end of a fiscal year.²⁷ Adjustments to the value of plan obligations and assets are made to incorporate service and interest costs, plan amendments, gains, employer contributions, and distributions. There may be more than one account on the firm's balance sheet to recognize the pension liability; these accounts and amounts therein are not shown in the table for the combined companies,²⁸ which focuses instead on the funded status. The company data indicate that total plan assets exceeded total benefit obligations of the companies' combined defined pension benefit plans by \$2.3 billion in 2000, but became much less than those obligations in 2001 and 2002 (by \$3.0 billion and \$8.0 billion, respectively). Company reports also indicate that because these plans collectively are underfunded, the amounts recognized as current and long-term liabilities or as a charge to stockholders' equity are growing. The positive funding status in 2000 is accounted for mainly by USS (\$2.4 billion overfunded pension plan) and Carpenter Technology (\$446.5 million overfunded pension

²⁵ Bethlehem Steel, 2000 Form 10-K, p. 16 (as filed) and 2002 Form 10-K, p. F-4 (as filed).

²⁶ Bethlehem employed an average of 14,700 employees during 2000 compared to 73,700 pensioners receiving benefits at year end 2000. The corporation's employment costs, including pensions and OPEBs, were \$1.3 billion out of total operating costs of \$4.3 billion in 2000. Salaries and wages accounted for \$818 million of Bethlehem's employment costs compared with employee benefit costs of \$513 million. Pensions and OPEBs were \$55 million and \$358 million in 2000, respectively. Bethlehem, 2000 Form 10-K, pp. 17 and 23 (as filed) and 2002 Form 10-K, p. F-4 (as filed). *See* discussion on OPEBs later.

²⁷ Actual pension payments may be based on projected salary or wage levels; the present value of plan obligations, based on service to date, actuarial assumptions, and projected salary levels is referred to as the projected benefit obligation (PBO). The present value of plan obligations using current salary or wage levels and these other assumptions is the accumulated benefit obligation (ABO). If wage or salary increases are not incorporated into the pension benefit formula, the ABO and PBO would be equal.

²⁸ The amounts recognized and shown in a company's balance sheet are the funded status of its defined benefit plan at year end with adjustments to incorporate unrecognized costs and actuarial gains as well as any additional minimum liability.

plan), while many of the remaining companies with defined benefit pension plans have underfunded plans. All of the companies surveyed reported that their plan assets fell between 2000 and 2001 and again between 2001 and 2002, resulting in a growing imbalance between plan assets and liabilities.

Post-employment benefits other than pensions (OPEBs) generally include health and medical benefits and life insurance plans.²⁹ The data show that the current cost was greater in each period than the net periodic cost of the companies' pension plans; like pension plan costs, these costs are included in COGS and in inventory. The data also indicate that the combined OPEB plans are underfunded. There are several important differences between pension plans and OPEBs. Compared with defined benefit pension plans, OPEBs generally (1) are less well funded; (2) include an uncapped benefit with high variability; (3) cover the retiree as well as a range of dependents; (4) have a benefit that is payable as needed and used; and (5) have a lower predictability of benefit utilization, which is less sure and costs of which are more difficult to predict.³⁰ Moreover, in contrast to pension benefits, OPEBs are not insured by the PBGC, as noted earlier.

As noted in the section 201 investigation, several steel companies in bankruptcy proceedings classified their unfunded pensions and their OPEB liabilities as "at risk." Laclede, for example, stated, "as a result of the filing under Chapter 11 on November 30, 1998, the Company is not permitted to make contributions to the pension plans related to pre-petition liabilities. Due to the size of the underfunding of the hourly and salaried pension plans, the Company expects the plans will be terminated and the pension obligations assumed by the PBGC."³¹ Acme, operating under bankruptcy since 1998, also stated that it is not permitted to make contributions to its pension plans related to pre-petition liabilities without approval of the bankruptcy court, although it was not prevented from making any contributions through year end 2000; Acme stated that it has no funding requirements for 2001.³² LTV, which filed for bankruptcy protection on December 29, 2000, stated that the bankruptcy court allowed the payment of certain employee benefits. While it stated that there will be no significant pension funding requirements before 2004,³³ nonetheless, it classified as "at risk" pension benefits of \$642 million and postemployment health care and insurance benefits of \$1.6 billion.³⁴ As noted earlier, each of these companies discharged most of their OPEB obligations in bankruptcy (see earlier discussion regarding pension plans assumed by the PBGC).

²⁹ Many of the steel companies surveyed for this section reported making contributions to a Voluntary Employee Benefit Association Trust (VEBA), established January 1, 1994 for payment of health care benefits made to United Steelworkers of America retirees; funding of the trust is made as claims are submitted for payment or according to a schedule based on hours worked.

³⁰ Patrick R. Delaney et al. (eds), *Wiley GAAP 2002*, chap. 16, pp. 701-731.

³¹ Laclede Steel Co., Item 7, Employee Benefits, 2000 Form 10-K, p. 38 (as filed).

³² Acme Metals, Inc., 2000 Form 10-K405, p. 52 (as filed).

³³ LTV Corp., 2000 Form 10-K405, p. 62 (as filed).

³⁴ *Ibid.*, p. 58 (as filed).

RECENT COLLECTIVE BARGAINING AGREEMENTS AND RELATED ACTIVITIES

The principal union representing steelworkers in the United States is the United Steelworkers of America (USWA). The International Union, United Automobile, Aerospace and Agricultural Implement Workers of America (UAW), and several independent unions, such as the Independent Steelworkers Union (ISU) represent fewer workers in the steel industries subject to the safeguard measures. Since March 2000, most labor agreements have been made by USWA.

In September 2002, at its Basic Steel Industry Conference (BISC), the USWA adopted a new set of principles to secure labor agreements that, according to the USWA, would save jobs in the steel industry and maintain or enhance living standards of its members and retirees while aiding U.S. steel producers to recover from bankruptcy and become successful.³⁵ The BISC bargaining principles include: (1) company pursuit of financial viability; (2) streamlined and simplified operating procedures, with fewer supervisors, protected worker seniority, safety, and with USWA workers; (3) preservation of existing levels of wages and benefits; (4) preservation of pension benefits; (5) a greater role by the USWA in company activities; (6) profit sharing; (7) obligations by the companies to make appropriate capital expenditures and restrictions on company owner and executive compensation at the expense of workers; and, (8) medical care for retirees to the extent possible.³⁶

Because the USWA pursues a “pattern bargaining” approach,³⁷ the BISC principles were the basis of recent agreements that were concluded in 2003 with ISG, U.S. Steel, and Wheeling-Pittsburgh Steel.³⁸ In January 2003, an agreement was reached between USWA workers and ISG, which had purchased the assets of LTV and proposed buying other steel companies in bankruptcy. The plan provides for a benefit trust to provide for funding of health-care for retirees of predecessor companies.³⁹ That agreement allows for a significant reduction in employee and retiree healthcare expenses through a variable cost sharing mechanism, and provides for early retirement incentives. The contract also provides for profit sharing from significant productivity gains. A similar labor contract was concluded in April 2003 between USWA workers and U.S. Steel.⁴⁰ When ratified, the contract would expire in September 2008. In June 2003, the USWA ratified an agreement with ISG for steelworkers at the former Bethlehem Steel facilities. The agreement, which expires in September 2008, includes provisions for pension benefits under a defined benefit plan and a fund to provide health care for retirees of Bethlehem Steel, together with profit-sharing and labor productivity arrangements.⁴¹ In July 2003, the USWA

³⁵ See posthearing brief of USWA, p. 3. See also USWA, press release, “USWA Launches New Bargaining Initiatives Aimed At Saving Steel Jobs and Securing Member and Retiree Living Standards,” September 20, 2002, found at <http://www.uswa.com>, retrieved August 27, 2003.

³⁶ Posthearing brief of USWA, exh. 2.

³⁷ Pattern bargaining is used by unions to obtain similar labor agreements covering its members within an industry.

³⁸ The USWA is not represented at Nucor, Rouge Steel, or Weirton Steel. See, posthearing brief of USWA, p. 17.

³⁹ USWA, press release, “Steelworkers’ Tentative Agreement with ISG Will Fund Health-Care Relief for LTV, Acme Retirees,” January 29, 2003, found at <http://www.uswa.com>, retrieved August 27, 2003.

⁴⁰ U.S. Steel Corp., press release, “U.S. Steel and USWA Reach Progressive New Labor Agreement for U.S. Steel and National Steel Represented Facilities,” April 9, 2003, found at <http://www.ussteel.com>, retrieved August 27, 2003.

⁴¹ USWA, press release, “Steelworkers at Former Bethlehem Facilities Overwhelmingly Ratify Agreement with New Owners, International Steel Group (ISG),” June 16, 2003, found at <http://www.uswa.com>, retrieved August 27, 2003.

approved a 5-year agreement with Wheeling-Pittsburgh Steel.⁴² The agreement satisfied one of several conditions set by the Emergency Loan Guarantee Board for a U.S. government loan guarantee for the company, and was one reason that Wheeling-Pittsburgh Steel successfully emerged from bankruptcy in August 2003 (discussed later). The agreement includes provisions to allow workers with 30 years of service to retire with full pensions before age 62 and employee profit sharing.⁴³

These collective bargaining agreements are discussed in detail in chapter 2 (Carbon and Alloy Flat Steel) part IV. Additional discussion of these agreements as they relate to non-flat steel products appears in chapters 3, 4, and 5.

TRADE ADJUSTMENT ASSISTANCE FOR WORKERS

U.S. workers who lose their jobs or whose hours of work and wages are reduced as a result of increased imports may seek assistance under the Trade Adjustment Assistance (TAA) program established under the Trade Act of 1974.⁴⁴ The TAA program provides for (1) training services for employment in another job or career; (2) income support; (3) job search allowance; and/or (4) relocation allowances. Workers certified by the TAA program may receive up to 104 weeks of approved training services, which are provided by certified state agencies. Income support, known as trade readjustment allowances (TRA) are weekly cash payments available for 52 weeks after a worker's unemployment compensation benefit is exhausted and during which a worker is participating in an approved full-time training program. As a result, a worker may receive income support for a total of 78 weeks: 26 weeks of unemployment compensation and 52 weeks of TRA.⁴⁵

In 1994, a NAFTA-TAA program was established to assist workers that were affected by the North American Free Trade Agreement. In August 2002, the Trade Adjustment Assistance Reform Act of 2002 was signed into law, and reauthorized the TAA program through September 30, 2008.⁴⁶ Under the Act, the NAFTA-TAA program was repealed and consolidated in the TAA program. The Act also increased benefit levels and provided tax credits for health insurance coverage assistance, as well as increases the timeliness for the receipt of benefits and training. Further, under the Act, the Alternative Trade Adjustment Assistance (ATAA) program for older workers was created to provide a wage subsidy for eligible persons over age 50 to assist in bridging the salary gap between old and new employment.⁴⁷ Coverage of the TAA program was expanded to include affected secondary workers, such as those in downstream producing companies performing value-added production processes or of suppliers of component parts to an affected company.

⁴² USWA, press release, "Steelworkers at Wheeling-Pitt Approve 5-year Agreement," July 30, 2002, found at <http://www.uswa.com>, retrieved August 27, 2003.

⁴³ USWA, press release, "USWA Tentative Agreement "First Step" Toward Saving Wheeling-Pittsburgh Steel," September 13, 2001, found at <http://www.uswa.com>, retrieved August 27, 2003.

⁴⁴ 19 U.S.C. 2271 et. seq., P.L. 93-618, as amended.

⁴⁵ See U.S. Department of Labor (DOL), Employment and Training Administration (ETA), "Trade Adjustment Assistance," found at <http://www.doleta.gov/programs/factsht/taa.cfm>, retrieved September 10, 2003.

⁴⁶ See Public Law 107-210, 116 Stat. 935, August 6, 2002.

⁴⁷ See DOL, ETA, "Trade Adjustment Assistance Reform Act of 2002," found at http://www.doleta.gov/tradeact/2002act_index.cfm, retrieved September 10, 2003.

According to data from the U.S. Department of Labor, Employment and Training Administration (ETA), for the U.S. steel industry overall,⁴⁸ the number of TAA petitions, excluding NAFTA-TAA petitions, both certified and denied, peaked in the period before the implementation of the safeguard measures, as shown in the following tabulation:

Period	Certified	Denied
April 2000-March 2001	15	11
April 2001-March 2002	88	33
April 2002-March 2003	38	23
April 2003-August 2003	24	19

Since each petition is for workers at a particular location, there may be a number of petitions related to a company that has multiple locations with affected workers. For example, during April 2001-March 2002, there were 16 petitions filed by workers of Republic Industries, and for LTV Corp. there were 9 petitions.

Since April 2000, for the steel industry, there were 35 petitions under NAFTA-TAA, 12 certifications and 23 denials. Seven certifications were before the implementation of the steel safeguard measures and 5 certifications since. Petitions were filed by workers, companies employing the workers, or unions, including the United Steelworkers of America. Data on the number of persons associated with these certifications are not available as the ETA does not publicly provide those data.

⁴⁸ Data are from U.S. Department of Labor, Employment and Training Administration, Trade Act Programs: Petition Determinations, found at <http://www.doleta.gov/tradeact/determinations.cfm> for Standard Industrial Classification industries: 3312, Steel Works, Blast Furnaces (Including Coke Ovens), and Rolling Mills; 3315 Steel Wiredrawing and Steel Nails and Spikes; 3316, Cold-Rolled Steel Sheet, Strip, and Bars; and 3317, Steel Pipe and Tubes.

Data on TAA petitions were also presented in the posthearing brief of the USWA, on flat products, p. 22, and exhibit 3; and posthearing brief of U.S. Steel, pp. C-1 and C-2, and exh. 31.

PRICING

Publicly available pricing series for steel products are available for only a limited number of steel products (figure OVERVIEW III-10 and figure OVERVIEW III-11). The data are based on information collected from purchasing managers and represent average transaction prices for the product.

DISTRIBUTION TRENDS

Importers and Channels of Distribution

U.S. steel production is either internally consumed by steel producers or their subsidiaries, or sold to converters, processors,⁴⁹ distributors, service centers,⁵⁰ or end users. Some U.S. companies will convert purchased steel, such as hot-rolled or cold-rolled steel, into other steel mill products, such as corrosion-resistant steel or pipe and tube. Stainless steel bar has another layer of distribution, “master distributors,” which purchase primarily from U.S. importers because of their affiliations with foreign mills and resell principally to regional service centers and not directly to end users.

Reported U.S. shipments to steel service centers and distributors accounted for 26.4 percent of total net U.S. shipments of steel mill products based on tonnage in 1999 and 27.5 percent in 2002.⁵¹ In contrast, steel for converting or processing accounted for 10.4 percent of net U.S. shipments of steel mill products in 2001. Including U.S. imports, steel service centers distribute over one-half of certain steel products consumed in the United States, such as major carbon and stainless steel products.⁵² In many product areas, the majority of U.S. imports are shipped to distributors, processors, or service centers, as opposed to end users, including original equipment manufacturers (OEMs).⁵³

⁴⁹ Processors fill a market niche that exists between the primary steel producers and end-users, performing various value-added operations. Intermediate processing operations include a variety of activities, such as slitting, cutting-to-length, pickling and oiling, edge trimming, leveling, painting, blanking, and so forth. Processors may either purchase the steel, process and then resell it, or perform these services for a fee (a toll) and not take title to the steel being processed.

⁵⁰ U.S. service centers serve as distributors and processors not only of steel, but of other metals, such as aluminum, copper, bronze, and brass. Many service centers maintain extensive inventories of a variety of steel products which they own and resell, thus providing availability and inventory management services for customers of all sizes, including those with smaller purchasing needs that must place low-volume orders. Increasingly, service centers perform a wide range of value-added processing, such as uncoiling, flattening, and cutting products to length, for their customers.

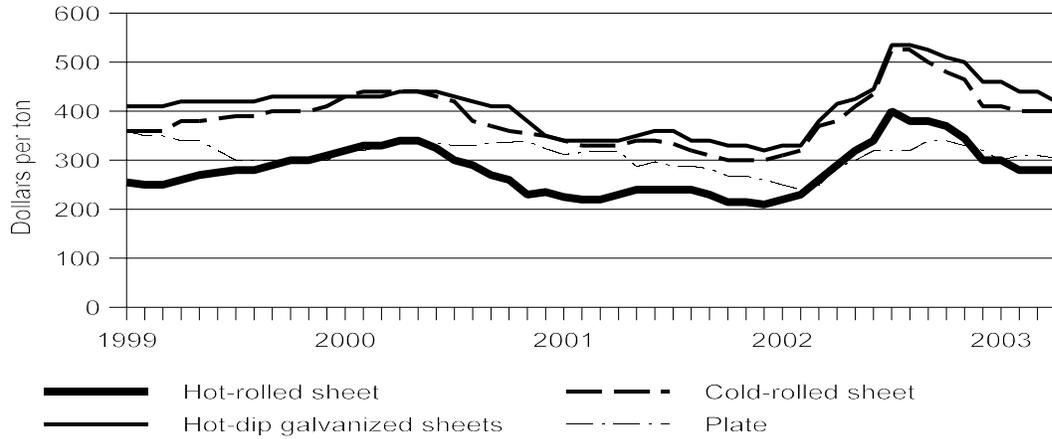
⁵¹ AISI, *Annual Statistical Report, 2002*, table 11, “Net Shipments of Steel Mill Products by Market Classifications, All Grades,” pp. 30-31. During 1999-2002, between 9.7 percent and 11.7 percent of net shipments were classified by AISI as nonclassified shipments, and it is possible that some of these shipments were to steel service centers and distributors.

⁵² Steel Service Center Institute (SSCI), “Statement of The Steel Service Center Institute Before The Congressional Steel Caucus,” March 21, 2001, found at Internet address http://www.ssci.org/final_caucus.adp, retrieved August 15, 2001.

⁵³ Based upon review of numerous Commission antidumping and countervailing duty investigation reports.

Figure OVERVIEW III-10

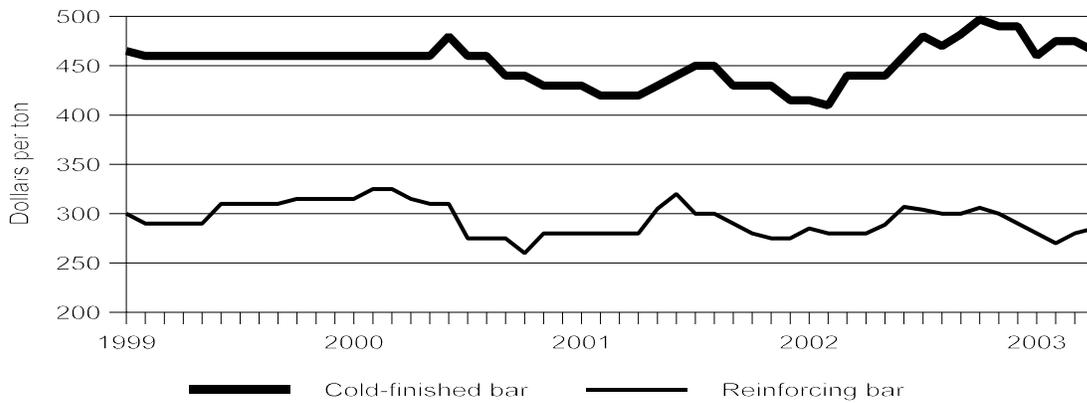
Steel: Flat-rolled carbon steel transaction prices, monthly, January 1999-April 2003



Source: *Purchasing Magazine*.

Figure OVERVIEW III-11

Steel: Carbon steel long products transaction prices, monthly, January 1999-April 2003



Source: *Purchasing Magazine*.

U.S. steel producers generally do not own and are not financially linked to processors or service centers,⁵⁴ with the major exception of U.S. Steel Corp.'s Straightline Source, an online company started in October 2001 that competes in e-commerce and distribution.⁵⁵ Only two U.S. steel companies, producers of stainless steel, specialty alloys, and other metals, own U.S. service centers.⁵⁶ In contrast, foreign steel producers, particularly those in Europe, tend to control a greater share of service centers and other channels of distribution in their home markets. There is also a significant European, South African, and Canadian foreign ownership presence in the U.S. service center industry. These firms are notably among the largest service centers in the United States.⁵⁷

The U.S. metals distribution industry, including steel service centers, consists of approximately 1,300 companies operating at more than 3,500 locations.⁵⁸ During 1996-2002, at least 155 acquisitions were made by service centers in the United States and Canada.⁵⁹ In late 2001 and 2002, a major service center entered and exited bankruptcy and a leading service center was formed out of the merger of two

⁵⁴ SSCI, "Statement of Robert J. Carragher on Behalf of the Steel Service Center Institute before the Organization for Economic Co-Operation and Development," Paris, France, November 30, 2000, found at Internet address http://www.ssci.org/oecd_statement.adp, retrieved August 16, 2001.

⁵⁵ U.S. Steel Corp., the largest U.S. steelmaker, launched Straightline Source in October 2001, stating that Straightline was the "first steel distribution business created to serve customers of all sizes who do not typically buy directly from steel producers." Straightline Source is an e-business (i.e., an electronic business based around the Internet) that provides customers with processed steel through the processing capacity of a network of qualified partners (such as processors and steel service centers), with transportation to the customer managed by a third party logistics company. Initially, Straightline Source specialized in providing carbon flat-rolled steel. The company began its business regionally, and by the end of 2002, provided service to more than 700 customers in 34 states east of the Rocky Mountains. In 2003, Straightline plans to provide service in the western United States and also to expand its product offerings to include galvalume, galvaneal, and aluminized products.

Straightline Source had operating losses of \$18 million in the second quarter of 2003, and \$33 million for the first six months of 2003, \$41 million in 2002, and \$17 million in 2001. See U.S. Steel Corp., press release, "United States Steel Launches Straightline—A New Steel Distribution Business," October 30, 2001, found at <http://www.prnewswire.com>, retrieved January 30, 2003; U.S. Steel, LLC, press release, "Straightline Unveils 2003 Expansion Plans," December 18, 2002, found at <http://www.prnewswire.com>, retrieved January 30, 2003; U.S. Steel Corp., *Form 10-K*, March 10, 2003, and *Form 10-Q*, May 13, 2003, found at <http://www.sec.gov>, retrieved June 4, 2003; and U.S. Steel Corp., *Form 10-Q*, August 13, 2003, found at <http://www.sec.gov>, retrieved August 27, 2003.

⁵⁶ Carpenter Technology Corp. and Crucible Materials Corp.

⁵⁷ For example, Thyssen Inc. (North America), wholly owned by Thyssen Krupp AG of Germany, ranks second, with sales of \$1.9 billion (including products and services other than steel or steel-related) in 2002, among the top 100 metal service centers in the United States and several European steel producers either operate service centers or have U.S. service centers as subsidiaries. These include Namasco Corp., with sales of \$789 million in 2002, which is owned by Klockner AG of Germany, and Preussag North American, Inc. with sales of \$698 million in 2002, which is owned by Preussag AG of Germany. ARBED Americas, Inc., owned by Arbed Group of Luxembourg, owns several distributors and fabricators of steel products.

Eighth-ranked MacSteel Service Centers USA, with sales of \$1.0 billion in 2002, is owned by MacSteel Holdings of South Africa, a global metals trader and distributor. Canadian service center firms have invested in numerous facilities in the United States. For example, Samuel, Son & Co. ranked sixth with sales of slightly more than \$1 billion in 2002, has 29 service centers in the United States, as well as a steel processing facility. See Tom Stundza, *Purchasing Magazine Online*, "Suppliers must boost service to buyers," May 1, 2003, found at <http://www.manufacturing.net/pur>, retrieved June 3, 2003.

⁵⁸ Tom Stundza, *Purchasing Magazine Online*, "Suppliers must boost service to buyers," May 1, 2003, found at <http://www.manufacturing.net/pur>, retrieved June 3, 2003.

⁵⁹ Compiled from various trade magazines, newspapers, company Internet sites, and financial filings with the U.S. Securities and Exchange Commission.

companies.⁶⁰ Many service centers have pursued acquisitions or constructed new facilities in order to expand into geographical markets where they did not have a presence, to enhance their ability to service national accounts, to broaden fabrication and processing capability, or to expand their product line. Service center firms also have increased their size by constructing new facilities to expand into geographical markets and service national accounts.

Growth in the service center industry has been driven by the requirements of the manufacturing industry for further processing of metals prior to the production of parts and components. This trend has also resulted in an expanding toll/contract processor industry, thereby eliminating processing operations at some OEMs. However, the service center customer base has also been consolidating. In 1999, a new development took place in the distribution channel for the automotive market when General Motors' Regional Steel Distribution Center in Holt, MI,⁶¹ streamlined its supply chain by maintaining steel inventories and performing processing in-house, rather than contracting with toll processors.⁶²

Importers of steel tend to be the foreign steel companies or their steel trading subsidiaries, Japanese trading companies, international metals trading companies, U.S. service centers, U.S. steel producers, or U.S. end users. The volume of imports shipped to distributors, service centers, and end users varies greatly by type of product (e.g., carbon versus stainless, flat-rolled versus long products); the degree of value-added, such as hot-rolled versus corrosion-resistant steel); the market (OEM or replacement); and the supplier country.⁶³

⁶⁰ Prior to the implementation of the steel safeguard measures, Metals USA, which ranked fourth among North American service centers in 2000 with sales of \$2.1 billion, filed for bankruptcy in November 2001 because of high debt due to acquisitions made prior to 2000 and declines in U.S. steel consumption and steel prices. *See* Metals USA, Inc., SEC Form 10-K, for fiscal year ending December 31, 2002, filed March 28, 2003, found at <http://www.sec.gov>, retrieved June 4, 2003. After the implementation of the steel safeguard measures, Metals USA sold some assets and emerged from bankruptcy in October 2002. Integris Metals, which ranked fourth among North American service centers in 2002 with sales of \$1.5 billion, was formed in November 2001, when Alcoa, a large U.S. aluminum producer, merged its subsidiary Reynolds Aluminum Supply Company, with BHP Billiton's Vincent Metal Goods and Atlas Ideal Metals. Alcoa and BHP Billiton each own 50 percent of Integris. The company employs approximately 3,000 persons in 60 locations in the United States and Canada. Integris supplies aluminum, stainless steel, alloy steel, brass/copper, building products, carbon steel, and nickel alloys. *See* Integris Metals, Fact Sheet, found at http://www.integrismetals.com/i_fact.html, retrieved January 24, 2003. In August 2003, Russel Metals Inc. of Canada, purchased Leroux Steel Inc., also of Canada, to form a large service center company in North America. Aside from locations in Canada, Russel Metals currently has 9 service center locations in the United States.

⁶¹ RSDC is a 50/50 joint venture between Kasle Steel Corporation and Itochu Corp. of Japan. RSDC in turn sells services to GM.

⁶² Tom Bagsarian, Metal Center News Online, "RSDC Delivers," August 2001, found at Internet address <http://www.metalcenternews.com/2001/Aug01/mcn0108f4rsdc.htm>, retrieved August 6, 2001.

⁶³ For example, in 1999, a majority of imports of hot-rolled steel from Argentina, China, India, Indonesia, Kazakhstan, the Netherlands, Romania, South Africa, Taiwan, Thailand, and Ukraine were to distributors, processors, and service centers. *See* U.S. International Trade Commission, *Hot-Rolled Steel Products From Argentina, China, India, Indonesia, Kazakhstan, Netherlands, Romania, South Africa, Taiwan, Thailand, and Ukraine* (investigations Nos. 701-TA-404-408 (Preliminary) and 731-TA-898-908 (Preliminary)), USITC Publication 3381, January 2001, p. I-9.

E-COMMERCE

The nature of the role of E-commerce in the steel industry has changed considerably over the past several years.⁶⁴ As originally conceived by some in the steel industry, business-to-business E-commerce would affect the entire nature of the steel industry, from the procurement of raw materials to the production of steel and to the selling of finished steel products, through operation of a public exchange for steel products.⁶⁵ The primary benefit promised by the creation of such an electronic network, featuring auctions and reverse auctions of steel products, was cost reduction resulting from price transparency and reductions of inventories. Allowing information on pricing to be determined on a public site, rather than in secret by steel trading intermediaries such as trading companies and brokers would lead to reduced price volatility and lower transaction costs related to the buying and selling of steel. Inventories would be reduced as steel suppliers established electronic links between their production systems and their customers. In addition to lowered costs and reduced inventories, creation of a public exchange promised to expand the universe of potential customers by allowing information on steel to be made available in a public forum.

In actual practice, E-commerce in steel has evolved somewhat differently from the original model.⁶⁶ Some of the reasons advanced by steel producers for the limited success,⁶⁷ thus far, of public steel exchange web sites include:⁶⁸

- a public exchange is often not appropriate for an engineered product such as steel, which must be processed to achieve certain physical properties required to meet a particular specification;
- steel producers have been largely reluctant to participate in public steel exchanges because they feel that such exchanges tend to favor buyers of steel at the expense of sellers as sellers are encouraged to compete against each other to satisfy a bid;
- unlike other markets where potential customers for a product appear to be unlimited, the number of participants in the relevant steel markets tends to be small and most suppliers are already aware of the entire universe of possible users of the product; and
- the steel industry has thus far appeared unwilling to accept the transaction fees associated with public exchange sales.

Prior to the implementation of the safeguards, two major public on-line exchanges were created.

⁶⁴ See previous section for a discussion of U.S. Steel Corp.'s Straightline Source involvement in E-commerce.

⁶⁵ Scott Robertson, "Key Role Seen for E-commerce in Steel," *American Metal Market*, March 22, 2000, at <http://www.amm.com/SUSCRIB/2000/Mar/special/0322-1.htm>.

⁶⁶ By the end of 2001, a number of the original public steel trading exchanges had ceased operations while other public exchange companies, including E-Steel, Core Markets, and Metal Suppliers Online, had decided to supplement the public exchange side of their business by designing E-Commerce supply management platforms for steel companies.

⁶⁷ Thus far, less than 1 percent of all steel traded is traded on public E-commerce web sites.

⁶⁸ Leading U.S. steel producers, telephone interviews by USITC staff, March-July 2003.

In May 2001, Global Steel Exchange (GSX),⁶⁹ began operations and sold its 1 millionth metric ton of steel by September of that year.⁷⁰ GSX differed from earlier attempts at public steel exchanges in that it targeted the international, rather than a regional or national, market for steel.

In the fourth quarter of 2000, Enron Corp. began buying and selling hot-rolled and cold-rolled carbon steel and some galvanized steel products using an on-line bid and offer process.⁷¹ In Enron's steel trading operations, domestic steel mills accounted for less than 50 percent of Enron's purchases with much of the remaining steel coming from service centers with excess inventories. Unlike earlier attempts at establishing an on-line exchange of steel, Enron acted as a principal in the transaction, buying steel for its own account, providing storage in various company-owned regional warehouses, selling the steel to customers, and profiting from the spread between the two prices. In addition to trading physical steel, Enron also bought and sold steel financial futures contracts on-line, allowing producers and customers to hedge against the risks of steel price volatility through the trading of financial futures contracts.⁷² Enron's involvement in on-line steel trading ended when the company filed for bankruptcy protection in December 2001.

After the implementation of the steel safeguard measures, in May 2002, GSX decided to close its operations after failing to agree on an arrangement for continued funding from its founding members. In July 2002 Management Science Associates Inc. (MSA), the parent of MetalSite, purchased the assets of GSX in order to apply GSX technology and client lists to help set up its version of a public steel exchange--a request-for-quote (RFQ) system to enable users to create and post-RFQs reflecting their steel needs.⁷³ At present, remaining known public on-line steel trading exchanges include Metal-Site, Inc., Steel Spider, and Metal Supplier Online.

The Growth of Private Marketplace Exchanges

Due to a general lack of satisfaction with public marketplace exchanges, the trend in the steel industry in recent years has been moving to the creation of private steel exchanges on company web sites as many of the major integrated and nonintegrated U.S. steel companies have established, or are in the process of establishing such exchanges. An on-line private exchange differs significantly from a public exchange in that a private exchange is maintained by a single company with a select group of suppliers and customers that are regulated by the owner of the exchange. In addition, private exchanges can be tailored to serve specific projects and customers, unlike public exchanges, which are generic in nature in

⁶⁹ The four founding members of GSX are Cargill Steel (U.S.), Duferco (Switzerland), Samsung (S. Korea), and TradeArbed (Luxembourg). GSX trades more than 50 steel products, ranging from raw products to finished steel.

⁷⁰ *American Metal Market*, "GSX E-Site Logs Sale of 1 Millionth Tonne," September 18, 2001, p. 3.

⁷¹ The effort by Enron was considered important by steel observers due to Enron's past success in trading other non-steel commodities and its perceived financial strength at the time as it built upon Enron's EnronOnline, an electronic transaction platform offering real-time pricing information for approximately 850 commodities that began in November 1999. Commodities initially traded on EnronOnline included electricity, natural gas, coal, pulp and paper, clean air credits, bandwidth, weather and credit derivatives, petrochemicals and plastics, and oil and refined products.

⁷² According to Enron Corp., the advantages of its electronic trading platform were improved price transparency and competition, increased liquidity, management of price volatility, increased transaction efficiency and reduced transaction costs, and convenience. (E-mail from Enron Corp., received August 28, 2001.)

⁷³ MSA's RFQ system supplements its other businesses, including the creation of supply management software systems for steel companies. See "MSA Buys Assets of Global Steel Exchange," MSA MetalSite website, retrieved May 29, 2003, at http://www.metalsite.net/metalsite_is/Press_room/article.cfm?i=240.

order to accommodate all users.⁷⁴ As presently constituted, private exchanges permit customers to enter orders, check order status, obtain chemical analysis information, and acquire information on delivery of the product, thereby eliminating or reducing many of the costs associated with the administration of these functions. Material typically is traded through a bidding process. A customer will bid on material listed on the exchange and is notified through the exchange if it has been awarded the material. The customer can then submit a purchase order via e-mail or facsimile.

A principal advantage of a private exchange is that it does not force participants to give up sensitive information to competitors or to suppliers serving those competitors, while the earlier public exchanges encountered resistance because they required the public sharing of price information.⁷⁵ By encouraging suppliers and customers to exchange information on a secure site, a private exchange gives suppliers a more accurate picture of customer needs, allowing manufacturers to tailor production cycles to better match customer demand requirements, resulting in reduced inventories, better management of distribution channels, and reduced transaction time and costs. Another advantage of a private electronic exchange is that it permits aggregation of transactions when a customer orders a variety of products from a company with multiple product lines or when a supplier sells to different divisions of a company, resulting in cost and time savings.⁷⁶ U.S. steel producers contacted by the Commission indicated that up to 6 percent of total steel sales were made through company web sites.

GOVERNMENT PROGRAMS (FEDERAL, STATE, AND LOCAL)

Within the United States, there has been government support for the steel industry at the federal, state, and local levels. Recent programs have included monitoring, loan guarantees, community assistance, and research and development (R&D) assistance.⁷⁷

Steel Action Plan

The Steel Action Plan of January 1999 featured a steel import monitoring program designed to identify sudden price declines or import increases, and included monthly steel import data released by the Department of Commerce. The program was set up in August 1999, and led to bilateral consultations with Korea and Japan and a steel agreement with Russia that set annual quotas on imports of Russian steel products.⁷⁸

⁷⁴ Pimm Fox, "Private Exchanges Drive B2B Success," *Computerworld*, May 7, 2001, at <http://www.itworld.com/Tech/3478/CWD010507ST>.

⁷⁵ Jennifer Caplan, "Private Exchanges Reinvent B2B: Private E-Marketplaces May Improve upon the Model Created by Public B2B Sites," *CFO.com*, April 2, 2001, at <http://www.cfo.com/pr...1,4580,87%7C88%7CAD%7C2484,00.html>.

⁷⁶ Jennifer Caplan, "Private Exchanges Reinvent B2B: Private E-Marketplaces May Improve upon the Model Created by Public B2B Sites," *CFO.com*, April 2, 2001, at <http://www.cfo.com/pr...1,4580,87%7C88%7CAD%7C2484,00.html>.

⁷⁷ See the Department of Energy, Office of Industrial Technologies Industrial Project Locator at <http://iplocator.y12.doe.gov/IPLocator/Scripts/Frameset.cfm?NoVar=Emptyv> for more information on such projects.

⁷⁸ International Trade Administration (ITA), U.S. Department of Commerce (DOC), *Global Steel Trade: Structural Problems and Future Solutions*, July 2000, p. 112.

Emergency Steel and Oil and Gas Loan Guarantee Program

This temporary steel loan guarantee program was designed to assist steel companies that are unable to obtain loans in the private sector.⁷⁹ It is administered by the Emergency Loan Guarantee Board and provides guaranteed loans of up to \$250 million to a single company,⁸⁰ with the total amount outstanding not to exceed \$1 billion.⁸¹ The loans must be repaid by year-end 2015. The authority of the Loan Guarantee Board to make commitments to guarantee any loan under the Emergency Steel Loan Guarantee Program will expire on December 31, 2003. Currently, proposed legislation H.R. 2881, introduced in June 2003, would reauthorize the program, raising the outstanding loan guarantee limit to \$2 billion, and extend the program to December 31, 2005.

As of August 2003, only three steel producers had received loans. Several companies that had been approved for loan guarantees subsequently into bankruptcy protection or ceased operations prior to the issuance of the loans.⁸² In June 2000, Geneva Steel received a loan guarantee and a loan in June 2000, but the company ceased operations in November 2001 and filed for bankruptcy in January 2002.⁸³ In March 2002, Hanna Steel, a steel tubing and prepainted coil manufacturer in Birmingham, AL, received a \$42.5 million loan guarantee.⁸⁴ In March 2003, Wheeling-Pittsburgh Steel Corp. received a loan guarantee for \$250 million.⁸⁵ In late June 2003, Weirton Steel applied for a \$175 million loan guarantee, although that company had entered bankruptcy in May 2003.

⁷⁹ Authority for this program is contained in P.L. 106-51; U.S.C. 15, Chapter 45, "Emergency Steel Loan Guarantee Act of 1999 and Emergency Oil and Gas Guaranteed Loan Program Act."

⁸⁰ No more than \$100 million will be provided to a company at one time. Sec. 336 Modification to Steel Loan Guarantee Program (Public Law 106-51; 15 U.S.C. 1841 note).

⁸¹ "Emergency Steel Loan Guarantee Board Loan Guarantee Program," General Accounting Office Briefing for the Staff of the Senate Committee on Commerce, Science, and Transportation, May 1, 2001.

⁸² Other producers of steel subject to the steel safeguard measures that received loan guarantee approvals but to which funds were not disbursed were Acme Steel Co., CSC Ltd., Northwestern Steel and Wire Co., and Wheeling-Pittsburgh Steel Corp. (withdrew request).

⁸³ On February 1, 1999, Geneva Steel Co. filed for bankruptcy under chapter 11 of the U.S. Bankruptcy Code. On January 31, 2000, the company applied for a loan guarantee under the Emergency Steel Loan Guarantee Program. The Board extended the guarantee offer to Citicorp USA for the term loan on June 30, 2000. The guarantee was for an 85-percent guarantee of a \$110 million term loan. Geneva Steel emerged from bankruptcy on December 31, 2000. Geneva Steel entered into a term loan agreement with Citicorp USA, Inc. for the \$110 million loan 85-percent guaranteed by the Board on January 3, 2001. On November 14, 2001, Geneva Steel shut down operations. Geneva Steel filed for bankruptcy on January 25, 2002, and Geneva Steel's parent filed for bankruptcy on September 13, 2002. See Geneva Steel Co., *Form 10-Q*, for the quarter ending June 30, 2000, filed with the SEC on August 14, 2000. See Geneva Steel Holdings Corp., *Form 10-K/A*, filed with the SEC on August 30, 2001. See Geneva Steel Holdings Corp., *Form 10-Q*, for the quarter ending September 30, 2001, dated November 16, 2002, filed with the SEC November 19, 2001. See Geneva Steel Holdings Corp., *Form 8-K*, filed with the SEC February 5, 2002, and *Form 8-K*, filed with the SEC September 20, 2002.

⁸⁴ Nancy E. Kelly, AMM.com, "Hanna Steel Getting Steel Loan Guarantee," March 29, 2002, found at <http://www.amm.com/subscribe/2002/mar/inside4/0329st05.htm>, retrieved August 28, 2003.

⁸⁵ *Emergency Steel Loan Guarantee Board Approves \$250 Million Loan Guarantee*, March 26, 2003, found at <http://209.101.155.2/public.nsf/docs/1999-lgb-press-releases>, retrieved May 22, 2003. In 2000, Wheeling-Pittsburgh Steel Corp. had been approved for a \$35 million loan guarantee, but the company withdrew its request in the months before it filed for bankruptcy in November 2000. See Wheeling-Pittsburgh Steel Corp., press release, "Executive Director of Emergency Steel Loan Guarantee Board to Visit Wheeling-Pittsburgh Steel Facilities," June 11, 2001, found at <http://www.wpsc.com>, retrieved August 26, 2003.

The Steel and Aluminum Energy Conservation and Technology Competitiveness Act of 1988

This Act,⁸⁶ also known as the Metals Initiative, helped finance research and development in the steel industry and is administered by the U.S. Department of Energy (DOE). In 1995, DOE's Office of Industrial Technologies (OIT) and leading U.S. steel producers joined together to form a strategic partnership under OIT's "Industries of the Future" program. Through this ongoing R&D program, OIT awards cost-share funding for R&D projects to address industry-defined priorities as well as national goals for energy and the environment.⁸⁷

State and Local Programs

Table OVERVIEW III-6 describes recent state and local programs within the United States that assist the steel industry. The extent of state and local programs was limited, both before the implementation of the steel safeguard measures in 2001 and also after implementation, with no programs being initiated in 2002, and two starting in 2003.

Table OVERVIEW III-6
State and local programs concerning steel, 1999-2003

State	Year	Description of program	Approximate value
Illinois	2000	Industrial revenue bond issued on behalf of Unimast for building and equipment	3.5 million
Indiana	2000	Steel Dynamics Whitley County was given a package from EDGE (Economic Development for a Growing Economy), Training 2000, the Industrial Development Loan Fund, and a stripper well overcharge rebate from the U.S. Department of Energy	\$9 billion
Indiana	2000	Tax incentives including 10 years of tax abatement and a state-guaranteed bond issued on behalf of Steel Dynamics in Butler	\$96 million
Minnesota	1998-99	Loan, state bond issue, and 20-year property tax abatement granted to Minnesota Iron and Steel, Nashwauk	\$80 million
Ohio	2003	Low-interest loan to Republic Engineered Products LLC	\$5 million
Ohio	2000	10-year tax abatement for renovations and construction to Worthington Industries, Columbus	\$1.29 million
Texas	1999	10-year property tax abatement package granted to Nucor	(¹)
Utah	1999	Tax breaks authorized for Geneva Steel and Nucor	\$660,000
West Virginia	2001	Grant to Wheeling-Pittsburgh Tax to complete construction of a paint line at its Beech Bottom, WV, plant	\$400,000
West Virginia	2003	Loans and loan insurance to Wheeling-Pittsburgh Steel Corp. to build an electric arc furnace and retire debt	\$110 million

¹ Not available.

Source: Economic, industry, and trade literature; *Paying the Price for Big Steel*, American Institute for International Steel (AIIS), 2000, and steel company press releases.

⁸⁶ U.S.C. Title 15, Chapter 77.

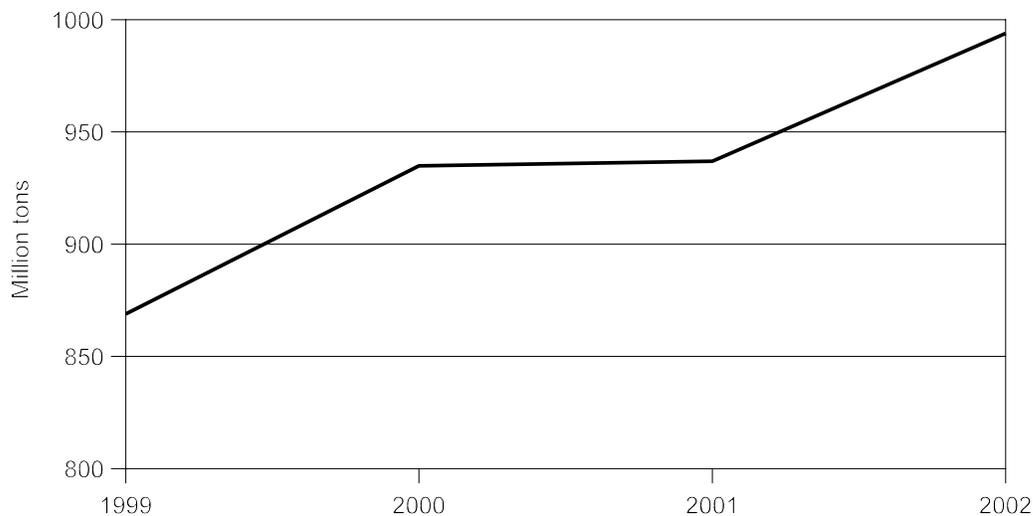
⁸⁷ See DOE OIT's list of current projects for steel research and development (R&D) at its internet site <http://www.oit.doe.gov/steel>.

PART IV: GLOBAL DEVELOPMENTS (1999-2002)¹

GLOBAL PRODUCTION, CAPACITY, AND EMPLOYMENT TRENDS

Between 1999 and 2002, world crude steel production increased by 14 percent, from 869 to 995 million short tons (tons) per year (figure OVERVIEW IV-1).² From 1999 to 2002, world crude steel production increased by an average of 4.6 percent each year, with a significant increase between 1999 and 2000, but almost no growth between 2000 and 2001. Production rose again between 2001 and 2002. During 1999-2002, much of the increase in world crude steel production was due to rising production in China (up by almost 47 percent), Japan (up by 14 percent), and the republics of the former Soviet Union (up almost 17 percent). During the same period, crude steel production in the European Union (EU) rose by 2 percent, while such production in North America declined by 5 percent (for the United States, a 5-percent decline, for Canada an almost 8-percent decline, for Mexico a 1-percent decline). For the first 3 months of 2003, world crude steel production was 250 million tons, almost 6 percent higher than during the comparable period in 2002.³

Figure OVERVIEW IV-1
World crude steel production, 1999-2002



Source: International Iron and Steel Institute, *World Steel in Figures*, 2003 and previous years.

¹ This section is based on information presented in the Commission's section 201 steel report, and has been updated to reflect changes since October 2001. See, *Steel*, Inv. No. TA-201-73, USITC Pub. 3479, December 2001. The information in this section has been

² International Iron and Steel Institute (IISI), *World Steel in Figures*, 2003 and earlier editions. IISI data are in metric tons, and were converted to short tons using .907 metric ton = 1 short ton.

³ IISI, "Monthly Crude Steel Production," *IISI 102*, May 19, 2003.

As indicated in table OVERVIEW IV-1, in both 1999 and 2002, China, the EU, Japan, the republics of the former Soviet Union, and the United States accounted for 70.7 percent of world production in 1999 and 71 percent of world crude steel production in 2002 .

Table OVERVIEW IV-1

Steel: Shares of world crude steel production, by selected sources, 1999 and 2002

Source	Share of world production in 1999	Share of world production in 2002
	<i>Percent</i>	
China	15.7	20.1
EU	19.7	17.6
Japan	11.9	11.9
Former republics of the USSR ¹	11.0	11.2
United States	12.4	10.2
¹ Data for 1999 and 2002 are for Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Latvia, Lithuania, Moldova, Russia, Ukraine, and Uzbekistan. Source: International Iron and Steel Institute, <i>World Steel in Figures</i> , 2003 and 2000 editions.		

China's share of world production increased from less than 16 percent in 1999 to more than 20 percent in 2002. The EU's share declined from almost 20 percent to slightly less than 18 percent. The shares accounted for by Japan and republics of the former Soviet Union (Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Latvia, Lithuania, Moldova, Russia, Ukraine, and Uzbekistan) remained virtually unchanged. The U.S. share declined from more than 12 percent to just over 10 percent, largely due to an 11-percent fall in production between 2000 and 2001.⁴

During 1999-2002, the proportion of steel produced using the basic oxygen process remained almost constant, at approximately 60 percent of world production, while the electric arc process accounted for 33 to 34 percent of world production, and the open hearth and other processes for approximately 5 percent.⁵ Russia and Ukraine continue to produce significant amounts of steel using the open hearth process. In 2002, the open hearth process accounted for almost 24 percent of the steel produced in Russia, and more than 47 percent of the steel produced in Ukraine.⁶

World production capacity is more difficult to quantify than actual production. Estimates⁷ suggest that global steel production capacity exceeds both actual production and current market demand. The difficulty in estimating capacity is two-fold. First, there may be significant differences between stated capacity and effective capacity. In almost all production facilities, effective capacity⁸ is less than stated production capacity. Second, stated capacity may be inflated by the inclusion of projected,

⁴ Ibid.

⁵ Ibid.

⁶ IISI, *World Steel in Figures*, 2003 edition.

⁷ The principal sources of steel industry capacity are World Steel Dynamics, Inc., and the Organisation for Economic Co-Operation and Development (OECD).

⁸ World Steel Dynamics, Inc., publishes data on effective capacity and defines effective capacity as the level of output that occurs one year after a surge in world steel export prices.

inoperative, or obsolete capacity. Estimated annual global crude steel production capacity for 2002 is 1.2 billion tons, exceeding production by an estimated 200 million tons.⁹

In August 2001, the Organisation for Economic Co-Operation and Development (OECD) began a series of high-level meetings to discuss the issues of excess capacity and market distortions. The meetings were attended by the OECD Steel Committee, observers, and representatives of key steel producing countries: Argentina, China, Kazakhstan, South Africa, and Taiwan.¹⁰ At the fifth such meeting in December 2002, senior government officials from major steel-producing countries identified subsidies and related government supports and trade remedies as two areas of great concern to attending representatives.¹¹ They directed that efforts be undertaken to formulate elements of an agreement to reduce or eliminate trade-distorting subsidies in steel at all levels of government, to evaluate the feasibility of options to facilitate plant closures, and to coordinate efforts with the World Trade Organization. As of the sixth meeting in July 2003, elements of an agreement for reducing or eliminating subsidies had been roughly defined, but with future work to consider an overall prohibition on subsidies to the steel industry, and how certain exceptions and a country's stage of economic development would be factored into such an agreement.¹²

While world steel production increased between 1999 and 2002, measurable employment in steel production decreased (employment can be measured for almost 70 percent of world steel production during each year of the period examined).¹³ Employment data for steel production in China and the former republics of the USSR (collectively accounting for up to 31 percent of annual world production during 1999-2002) are not comparable to employment data for the rest of the world. Typically, China and the republics of the former Soviet Union count all workers in steel-producing locales (areas immediately surrounding steel production facilities) as steel production workers. In addition, labor policies intended to provide full employment in those countries likely distort the relationship between the number of employees and the quantity of output.¹⁴

For the part of world steel production for which meaningful data are available, employment decreased by 12 percent between 1999 and 2002 (figure OVERVIEW IV-2).¹⁵ During 1999-2002, the average yearly decline in employment was 37,000 persons. Between 1999 and 2000, most of the decline in employment occurred in South Africa, followed by Japan. Between 2000 and 2001, the decline in employment occurred principally in the United States and Japan. Between 2001 and 2002, the greatest decline was in the United States, followed by the EU and Japan. By the end of 2002, fewer than 800,000 workers produced almost 70 percent of the world's steel.

⁹ OECD, *OECD Observer*, December 19, 2002.

¹⁰ OECD, press release, "OECD Meeting on Steel," found at <http://www.oecd.org>, retrieved September 11, 2003.

¹¹ OECD, press release, "OECD High Level Meeting on Steel: Progress Made on Cutting Subsidies, Overcapacity," found at <http://www.oecd.org>, retrieved September 11, 2003.

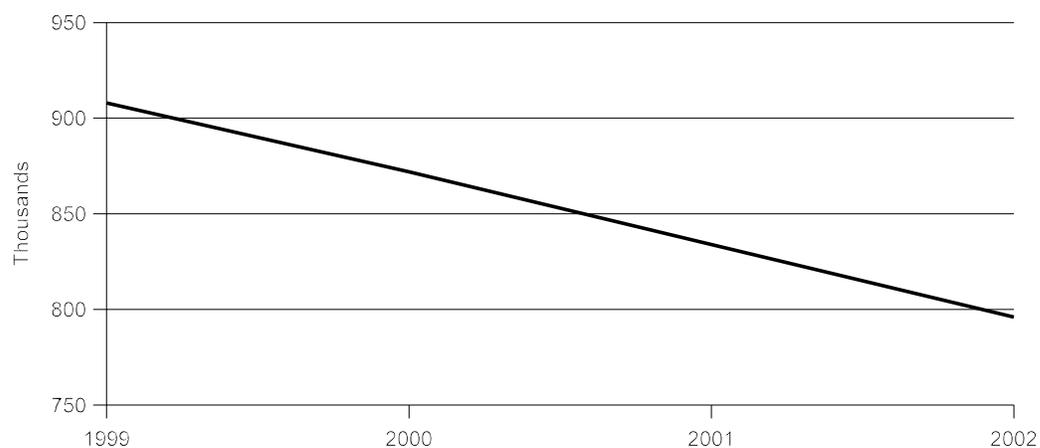
¹² OECD, press release, "Major Steel-Producing Economies Make Progress on Elements of a Steel Subsidies Agreement," found at <http://www.oecd.gov>, retrieved September 11, 2003.

¹³ IISI, *World Steel in Figures*, 2003 and earlier editions.

¹⁴ U.S. Department of Commerce, International Trade Administration, *Global Steel Trade: Structural Problems and Future Solutions*, July 200, pp. 43 and 143.

¹⁵ IISI, *World Steel in Figures*, 2003 and earlier editions.

Figure OVERVIEW IV-2
World steel industry employment, 1999-2002



Source: International Iron and Steel Institute, *World Steel in Figures*, 2003 and previous yearly editions.

GLOBAL TRADE IN STEEL

Between 1999 and 2001, the most recent year for which data are available, world exports of semi-finished and finished steel rose by almost 9 percent from 1999 to 2000, before falling by 2 percent from 2000 to 2001.¹⁶ Data on world exports do not match data on world imports due to discrepancies in the compiling of statistics by various countries. As a percentage of world steel production, exports were approximately 40 to 41 percent during 1999-2001.¹⁷ In 2001, the most recent year for which data are available, the top 5 exporting countries of steel, based on tonnage, were Japan, Russia, Ukraine, Germany, and Belgium-Luxembourg. The top 5 importing countries were the United States, China, Germany, Italy, and France.¹⁸

CONCENTRATION OF PRODUCERS

Despite continuing mergers between European producers, alliances between Asian producers, and increasing foreign investment by producers throughout the world, global steel production remains fragmented. In 2002, 75 competing firms produced more than two-thirds of the world's steel. As indicated in table OVERVIEW IV-2, between 1999 and 2002, the largest producers' collective share of world production increased slightly.

¹⁶ IISI, *World Statistical Yearbook*, 2002.

¹⁷ In the report for investigation No. TA-201-73, crude steel equivalents were used to measure world trade in steel. Because conversion efficiencies continue to increase, finished steel exports are a more consistent measure of export activity over time.

¹⁸ IISI, *World Steel in Figures*, 2003 edition, p. 11.

Table OVERVIEW IV-2

Steel: Share of global production, by firm grouping, 1999 and 2002

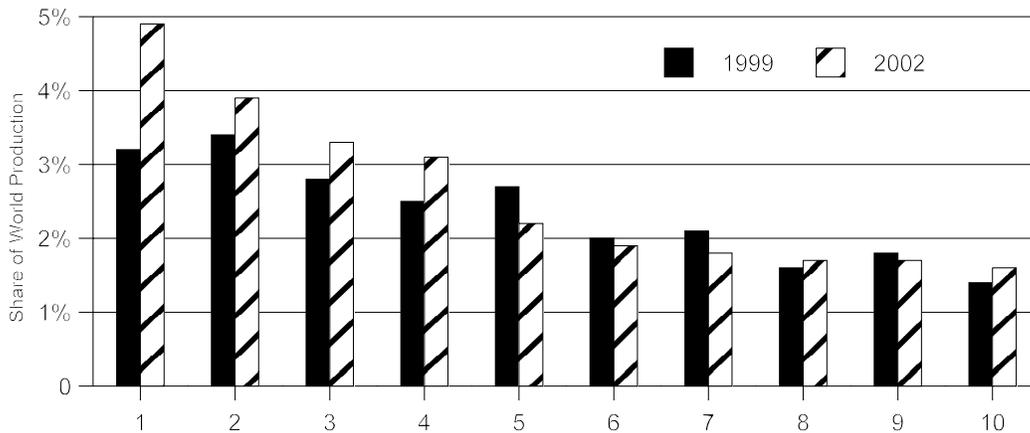
Largest firms	Percent of world production in 1999	Percent of world production in 2002
5 largest firms	14.7	17.3
10 largest firms	25.0	25.9
20 largest firms	37.1	38.2

Source: International Iron and Steel Institute, *World Steel in Figures*, 2003 and 2001 editions

In 1999, the individual production shares of the 5 largest producers ranged from 2.5 percent to 3.3 percent of total world production, with an average share of 2.9 percent. In 2002, their individual production shares ranged from 2.2 percent to 4.9 percent, with the average individual share increasing to 3.5 percent. According to data from the International Iron and Steel Institute (IISI), U.S. Steel ranked 10th in world crude steel production, and Nucor ranked 12th. Thus, with the consolidation in the U.S. steel industry during 2002 of ISG with assets of Bethlehem (ranked 22nd) and LTV (ranked 32nd in 2001) and Acme Metals, U.S. Steel’s acquisition of National Steel (ranked 37th), and Nucor’s acquisitions of Trico Steel and Birmingham Steel, U.S. steel producers are likely to be among the top 10 global steel producing companies. Consolidation is likely the reason for the change in the average individual production shares for the 10 largest producers, which increased from 2.5 percent in 1999 to 2.6 percent in 2002 as shown in figure OVERVIEW IV-3.

Figure OVERVIEW IV-3

Shares of world steel production, 10 largest producers, 1999 and 2002

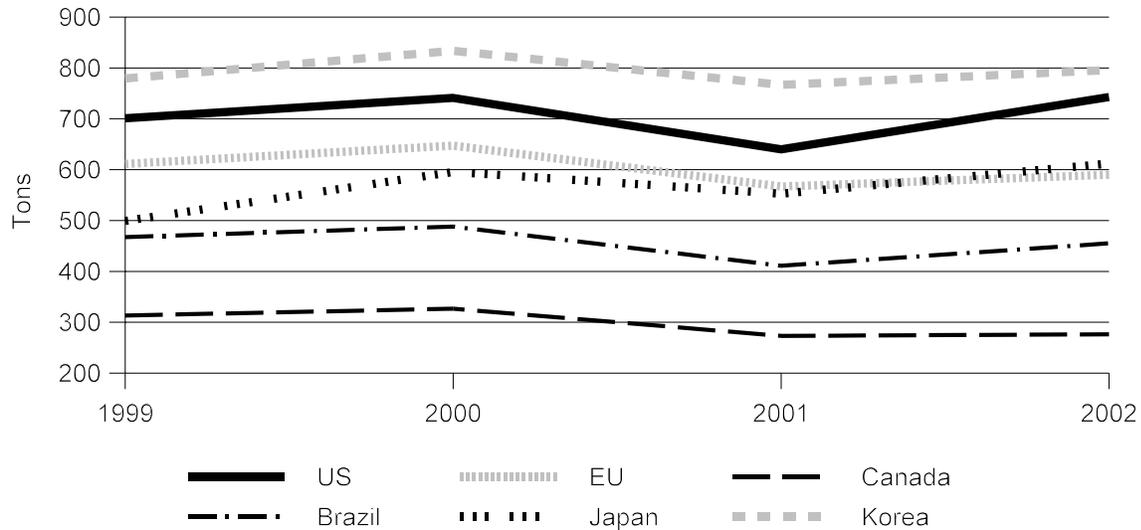


Source: International Iron and Steel Institute, *World Steel in Figures*, 2001 and 2003 editions.

PRODUCTIVITY TRENDS

Figure OVERVIEW IV-4 shows annual productivity as measured by IISI, in tons of crude steel produced per employee, for Canada, Brazil, the EU, Japan, Korea, and the United States during 1999-2002. These data are primarily useful for observing trends within national industries over time.

Figure OVERVIEW IV-4
Annual crude steel production per employee for selected countries, 1999-2002



Source: International Iron and Steel Institute, *World Steel in Figures*, 2000 through 2002.