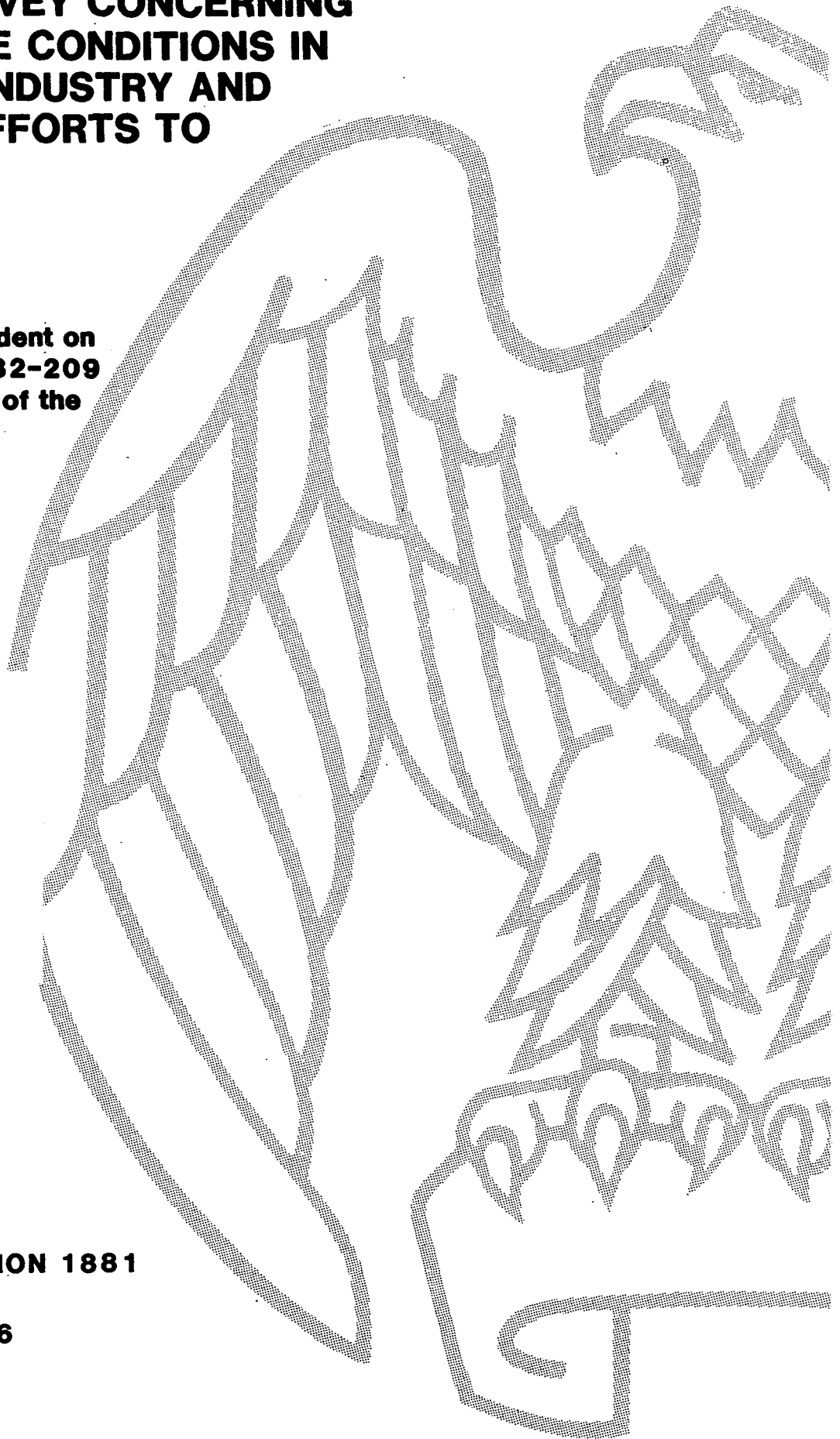


ANNUAL SURVEY CONCERNING COMPETITIVE CONDITIONS IN THE STEEL INDUSTRY AND INDUSTRY EFFORTS TO ADJUST AND MODERNIZE

**Report to the President on
Investigation No. 332-209
Under Section 332 of the
Tariff Act of 1930**

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UNITED STATES INTERNATIONAL TRADE COMMISSION

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Note.—The whole of the Commission's report to the President may not be made public since it contains certain information that has been classified by the United States Trade Representative or would result in the disclosure of the operations of individual concerns. This published report is the same as the report to the President, except that the above-mentioned information has been omitted (as indicated by asterisks) or combined with data from related product categories to ensure confidentiality.

PREFACE

On March 8, 1985, the United States International Trade Commission instituted investigation No. 332-209, Annual Surveys Concerning Competitive Conditions in the Steel Industry and Industry Efforts to Adjust and Modernize. The investigation, conducted under section 332(g) of the Tariff Act of 1930 (19 U.S.C. 1332(g)), is in response to a request from the United States Trade Representative, at the direction of the President (app. A).

This report is the second in a 5-year annual series that reports on competitive conditions in the steel industry and industry efforts to adjust and modernize. The survey compares the period July 1, 1985-June 30, 1986, with the 12-month period ending June 30, 1985. The data in the report cover U.S. producers' capacity, production, and shipments, as well as certain financial and employment information for 22 carbon and specialty steel products. Also presented in the report are data on U.S. producers' and importers' prices, as well as data on unfilled orders and inventories of the subject products.

In addition to the reported data, the report provides certain information for the 12-month period ending September 30, 1986 on: (1) the extent to which the major companies of the industry have committed, or will have committed, their net cash flow from steel product operations for purposes of reinvestment in, and modernization of, the steel industry; (2) actions taken by the major companies to maintain international competitiveness, and (3) the extent to which each of the major companies has committed, or will have committed,

not less than one percent of net cash flow to the retraining of workers. Information on world steel pricing, labor issues, and financial developments is also provided.

Notice of the investigation was given by posting copies of the notice of investigation at the Office of the Secretary, U.S. International Trade Commission, and by publication of the notice in the Federal Register of March 20, 1985 (app. B).

The Commission collected data and information from questionnaires sent to raw steel producers and selected importers of the carbon and alloy steel products subject to the investigation. Producers accounting for approximately 97 percent of U.S. raw steel production during July 1, 1985-June 30, 1986, and importers accounting for approximately 58 percent of imports of the subject products submitted data to the Commission. The producers which responded to the Commission's questionnaire are, with few exceptions, the same companies which responded to the previous survey; data are therefore generally comparable. Tables from the initial survey, some of which contain revised data, appear in Appendix H.

The information and analysis in this report are for the purpose of this report only. Nothing in this report should be construed to indicate how the Commission would find in an investigation conducted under other statutory authority covering the same or similar matter.

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EXECUTIVE SUMMARY

Industry Conditions

During July 1, 1985-June 30, 1986 (as compared to the previous 12-month period):

- o Shipments of the carbon steel products subject to the Commission's investigation increased by 6 percent while shipments of specialty steel products declined by 4 percent. The unit values of these shipments declined by 9 and 5 percent, respectively.
- o Losses as a percent of sales increased in the carbon steel sector from 3.7 to 4.1 percent, while profits declined on specialty steel sales, from 4.0 to 0.6 percent.
- o During the current reporting period, 5 companies filed for protection under Chapter 11 of U.S. bankruptcy laws, including LTV Corp. (the second largest domestic producer), which filed in July 1986. 1/ In addition, 5 companies shut down all steelmaking operations during the year.
- o Steel prices generally trended downward through the fourth quarter of 1985, but increased during the first half of 1986. Many second quarter prices, however, were still below their level in the initial quarter covered by the Commission's surveys (July-September 1984). The decline in the value of the dollar in recent months appears to have narrowed, and in some instances reversed, the differences between U.S. prices and prices in major foreign steel producing countries.
- o Employment in the industry declined by 7 percent, with the largest relative declines occurring in rails and related products (down 24 percent) and pipe and tube facilities (down 24 percent). During the year new labor contracts were negotiated with four of the six largest domestic steel producers. 2/ The contracts reduced compensation in three of the four companies, in amounts up to \$3.60 per hour, which compares to average compensation in the industry 3/ of \$22.81 per hour during 1985. The contracts also included provisions for limiting the extent to which steel producers can contract-out work. Labor productivity in the industry increased by about 10 percent, as the ratio of manhours per ton shipped in the carbon steel sector fell from 5.7 to 5.2.

1/ The implications on the industry of LTV's filing for protection will become clearer during the next several months. Data in this report do not reflect the effects of the action since it occurred subsequent to the reporting period.

2/ On August 1, 1986, an interruption in operations occurred at USX, the nation's largest steel producer, when the company's labor contract expired.

3/ As reported by the American Iron and Steel Institute.

- o Restructuring continued in the industry during the current reporting period, as raw steel capacity declined 3.2 and 15.5 percent in the carbon and specialty steel sectors, respectively. Capacity increases, however, occurred in continuous casting facilities (up 12.4 percent), and in the industry's galvanizing capability (up 28.0 percent). Capital expenditures declined by 25 percent, to \$1.9 billion during the year.

Adjustment of Major Companies

Following is information relating to the cash flow, and cash flow commitments (including commitments for the retraining of workers) of the major steel companies during the 12-month periods ending September 30, 1985 and September 30, 1986. 1/

* * * * *

1/ Under section 806 of the Trade and Tariff Act of 1984 (P.L. 98-573), the President is required to make an annual determination to the Committee on Ways and Means of the House of Representatives and the Committee on Finance of the Senate as to whether the major companies of the steel industry have, taken as a whole, committed substantially all of their net cash flow from steel product operations for purposes of reinvestment in, and modernization of, the industry through investment in modern plant and equipment, research and development, and other appropriate projects, such as working capital for steel operations and programs for the retraining of workers. A determination must also be made as to whether each of the major companies committed not less than 1 percent of net cash flow to the retraining of workers.

CONDITIONS AND ADJUSTMENT IN THE STEEL INDUSTRY

Industry Conditions

Highlights

Following is a tabulation which provides statistical highlights of the carbon steel industry (i.e., producers of carbon and certain alloy steel products), and certain segments of the specialty steel industry (i.e., producers of certain stainless and alloy tool steel products). 1/ The tabulation is based on information supplied by producers in response to Commission questionnaires and reflects data for the 12-month periods ending June 30, 1985 (1984/85) and June 30, 1986 (1985/86).

1/ See app. C for a description of the products subject to the investigation.

Item	Carbon and certain alloy steel 1/		Percentage change	Certain stainless and alloy tool steel 2/		Percentage change
	1984/85	1985/86		1984/85	1985/86	
Raw steel:						
Production.....million tons..	80.0	83.2	4.0	1.6	1.4	-20.4
Capacity.....do....	126.6	122.5	-3.2	2.4	2.2	-15.5
Capacity utilization.....percent..	63	68	3/	65	65	3/
Shipments 4/.....million tons..	61.2	65.2	6.4	1.1	1.0	-3.9
Production and related workers:						
Average number.....1,000..	175	162	-7.2	13.2	12.8	-3.2
Manhours.....millions..	352	339	-3.7	26	25	-3.1
Wages.....millions..	\$5,241	\$5,275	0.7	\$418	\$378	-9.5
Financial:						
Net sales.....millions..	\$27,542	\$27,226	-1.1	\$2,084	\$1,400	-32.4
Pre-tax profit or (loss)....do....	(\$1,027)	(\$1,113)	-4.0	\$83	\$8	-90.4
Return on sales.....percent..	-3.7	-4.1	3/	4.0	0.6	3/
Capital expenditures....millions..	\$2,398	\$1,822	-23.8	\$132	\$80	-39.1
Research and development expenditures.....do....	\$114	\$96	-15.8	\$18	\$17	-8.2

1/ Certain alloy steel refers to alloy steel other than stainless or alloy tool steel.

2/ Certain stainless and alloy tool steel refers to semifinished stainless and alloy tool steel products, stainless steel plates, stainless steel sheets and strip, stainless steel wire, and stainless steel pipes and tubes.

3/ Percent change not calculated.

4/ Shipment figures are not directly comparable to raw steel production data, since a significant quantity of scrap is generated in processing raw steel into finished products. Moreover, shipment figures do not include certain cast products, and, in the case of specialty steel, bars, rods, and most alloy tool steel products.

U.S. producers' capacity, production and capacity utilization 1/

Carbon and certain alloy steel.—U.S. carbon and certain alloy raw steel production totaled 83.2 million tons during July 1, 1985–June 30, 1986, an increase of about 4 percent from the level of output achieved during July 1, 1984–June 30, 1985. Carbon and alloy steelmaking capacity, however, declined 3 percent from 126.6 million tons during July 1, 1984–June 30, 1985 to 122.5 million during July 1, 1985–June 30, 1986. As a result, capacity utilization increased during the period, from 63 percent to 68 percent (table 1).

Capacity declines occurred in bars, wire and related products, and pipes and tubes, and ranged in relative size from less than 1 percent to 10 percent. Two of these categories, wire and related products and pipes and tubes, exhibited concurrent decreases in production. Declines in production also occurred in plates and rails and related products. The production declines contributed to decreased capacity utilization for plates, pipes and tubes, and rails and related products.

Certain stainless and alloy tool steel.—U.S. stainless and alloy tool raw steel production totaled 1.4 million tons and capacity was 2.2 million tons during July 1, 1985–June 30, 1986 (app. D, table D-1). This represents an overall capacity utilization rate of 65 percent, which is the same as the rate during July 1, 1984–June 30, 1985 (table 1). Capacity utilization rates increased in sheet and strip and pipe and tube products, rising to 70 percent

1/ Detailed data on U.S. producers' capacity, production, and capacity utilization during July 1, 1985–June 30, 1986 are presented in app. D. Final data on capacity, production, and capacity utilization during July 1, 1984–June 30, 1985 are contained in app. H.

Table 1.--Certain carbon and alloy steel: Changes in U.S. producers' reported capacity and production, and capacity utilization, by selected operations, July 1, 1984 - June 30, 1985 (1984/85) and July 1, 1985 - June 30, 1986 (1985/86)

Item	: Change in		: Capacity utilization	
	: capacity	: production	: 1984/85	: 1985/86
	-----percent-----			
Certain carbon and alloy steel: 1/	:	:	:	:
Cokemaking facilities.....	-2.8 :	-2.8 :	73 :	73
Ironmaking facilities.....	-3.1 :	3.3 :	62 :	66
Steelmaking facilities.....	-3.2 :	4.0 :	63 :	68
Continuous casting.....	12.8 :	13.9 :	76 :	77
Products:	:	:	:	:
Sheets and strip 2/.....	0.3 :	2.9 :	68 :	70
Plates.....	0.5 :	-5.8 :	41 :	39
Bars 2/.....	-0.1 :	10.0 :	59 :	65
Structural shapes and units.....	3.8 :	15.4 :	60 :	66
Pipes and tubes	-10.4 :	-16.2 :	37 :	35
Rails and related products.....	16.6 :	-29.2 :	67 :	41
Wire rod, wire, and wire products 3/.....	-8.9 :	-3.7 :	65 :	68
	:	:	:	:
	:	:	:	:
Stainless and alloy tool steel:	:	:	:	:
Steelmaking facilities.....	-7.3 :	-7.6 :	65 :	65
Continuous casting.....	-3.0 :	-10.3 :	93 :	86
Products:	:	:	:	:
Plates.....	26.2 :	15.3 :	71 :	65
Sheets and strip.....	-11.9 :	-7.2 :	66 :	70
Wire.....	-1.9 :	-2.4 :	79 :	79
Pipes and tubes.....	-17.3 :	-0.5 :	42 :	51

1/ Certain alloy refers to alloy steel other than stainless and alloy tool steel.

2/ Weighted average of subcategory products.

3/ Weighted average of wire rod, wire, and wire products.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

and 51 percent, respectively. Capacity utilization in plates declined to 65 percent during July 1, 1985–June 30, 1986 as capacity increased 26 percent. 1/

U.S. producers' shipments 2/

Carbon and certain alloy steel.—U.S. producers' shipments of carbon and certain alloy steel rose 6 percent from 61.2 million tons during July 1, 1984 to June 30, 1985 to 65.2 million tons during July 1, 1985–June 30, 1986. The unit value of these shipments declined 9 percent during the period, from \$461 per ton to \$420 per ton (table 2). Shipment declines occurred in three product categories: plates (a decrease of 5 percent), pipes and tubes (a decrease of 12 percent) and rails and related products (a decrease of 30 percent). Shipment increases ranging from 2 percent in wire rod, wire, and wire products to 16 percent in structural shapes and units occurred in the remaining product areas. The unit value of shipments declined in all product categories. Decreases ranged from 1.8 percent in rails and related products to 12.1 percent in pipes and tubes.

Certain stainless and alloy tool steel.—U.S. producers' shipments of certain stainless and alloy tool steel totaled 1.0 million tons during July 1, 1985–June 30, 1986, a decline of 4 percent from the 1.1 million tons reached during July 1, 1984–June 30, 1985. The unit value of such shipments fell 5 percent from \$1,982 per ton to \$1,889 per ton during the period. Shipment

1/ The increase in plate capacity reflects one company's reallocation of existing capacity from other flat-rolled operations to plate in connection with a shift in the mix of products produced on the firm's rolling facilities.

2/ Detailed data on U.S. producers' shipments during July 1, 1985–June 30, 1986 are presented in app. D. Final data on shipments during July 1, 1984–June 30, 1985 are contained in app. H.

Table 2.--Certain carbon and alloy steel: U.S. producers' shipments of selected products^{1/}, and the unit value of those shipments July 1, 1984 - June 30, 1985 (1984/85) and July 1, 1985 - June 30, 1986 (1985/86)

Item	Shipments			Unit value of shipments		
	1984/85	1985/86	Change	1984/85	1985/86	Change
	---1,000 short tons---	(percent)		---per ton---	(percent)	
Carbon and certain alloy steel: 1/						
Semifinished.....	1,288	1,357	5.4	\$385	\$294	-23.6
Sheets and strip.....	34,322	37,589	9.5	480	457	-4.7
Plates.....	3,486	3,306	-5.2	467	442	-5.5
Bars.....	10,517	11,241	6.9	388	362	-6.9
Structural shapes and units.....	3,903	4,532	16.1	352	344	-2.2
Pipes and tubes.....	2,767	2,424	-12.4	782	688	-12.1
Rails and related products.....	1,073	750	-30.1	464	456	-1.8
Wire rod, wire, and wire products....	3,889	3,973	2.2	387	356	-7.9
Total	61,244	65,171	6.4	461	420	-8.8
Stainless and alloy tool steel:						
Semifinished.....	79	88	11.4	2,751	2,169	-21.2
Stainless steel:						
Plates.....	148	166	12.6	2,239	1,690	-24.5
Sheets and strip.....	799	730	-8.7	1,742	1,774	1.9
Wire.....	29	29	1.0	3,455	3,252	-5.9
Pipes and tubes.....	20	20	-3.6	4,473	4,583	2.5
Total	1,076	1,034	-3.9	1,982	1,889	-4.7
Grand total.....	62,319	66,205	6.2	487	443	-9.0

1/ Certain alloy refers to alloy steel other than stainless and alloy tool steel.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

declines occurred in sheets and strip (a decrease of 9 percent) and pipes and tubes (a decrease of 4 percent). These two product categories also exhibited the only increases in the unit value of shipments.

U.S. producers' and U.S. importers' unfilled orders and inventories and U.S. importers' imports 1/

Carbon and certain alloy steel.—U.S. producers' unfilled orders as of June 30, 1986 totaled 7.7 million tons and inventories were 8.2 million tons, with a ratio of inventories to unfilled orders of 1.06 (app. D, table D-2 and table 3). This represents an increase of 8 percent over the ratio of 0.98 as of June 30, 1985. The greatest increase in the ratio of inventories to unfilled orders occurred in pipes and tubes (up 82 percent) and was due principally to a reduced level of unfilled orders. The wire rod, wire, and wire products category showed the sharpest decline in ratios, falling 66 percent, primarily as the result of a significant increase in unfilled orders.

The U.S. importers who responded to the Commission's questionnaire reported imports of carbon and certain alloy steel products of 12.5 million tons (\$5.6 billion) during July 1, 1985–June 30, 1986. These imports are believed to represent approximately 57 percent of total imports during the period (app. D, table D-3). Unfilled orders from the importers were 2.5 million tons as of June 30, 1986, which compared to inventories of 683,000 tons. The ratio of inventories to unfilled orders was 40 percent lower than

1/ Detailed data on U.S. producers' and U.S. importers' unfilled orders and inventories as of June 30, 1986 and U.S. importers' imports during July 1, 1985–June 30, 1986 are presented in app. D. Final data on unfilled orders and inventories as of June 30, 1985 are contained in app. H.

Table 3.--Certain carbon and alloy steel: U.S. producers' and U.S. importers' ratios of inventories to unfilled orders as of June 30, 1985 and June 30, 1986

Item	U.S. Producers			U.S. Importers		
	June 30,	June 30,	Change	June 30,	June 30,	Change
	1985	1986		1985	1986	
	(percent)			(percent)		
Carbon and certain alloy steel: 1/						
Semifinished.....	-	-		0.23	0.34	47.8
Sheets and strip.....	0.91	1.16	27.5	0.42	0.13	-69.0
Plates.....	0.66	0.59	-10.6	0.55	0.10	-81.8
Bars.....	1.24	1.02	-17.7	0.74	0.31	-58.1
Structural shapes and units.....	1.67	1.30	-22.2	0.25	0.10	-60.0
Pipe and tube.....	1.75	3.18	81.7	1.00	1.85	85.0
Rails and related products.....	0.34	0.47	38.2	0.06	0.30	400.0
Wire rod, wire, and wire products....	1.26	0.43	-66.2	0.12	0.16	28.3
Total	0.98	1.06	8.2	0.47	0.28	-40.4
Certain stainless and alloy tool steel:						
Semifinished.....	-	-		-	-	
Stainless steel:						
Plates.....	2.49	1.88	-24.5	***	0.28	***
Sheets and strip.....	1.42	1.32	-7.0	***	0.30	***
Wire.....	2.16	18.27	745.8	2.71	0.24	-91.1
Pipes and tube.....	1.96	3.46	76.5	***	1.13	***
Total.....	1.21	1.56	28.9	1.32	0.39	-70.5
Grand total.....	0.99	1.07	8.1	0.49	0.28	-42.9

1/ Certain alloy refers to alloy steel other than stainless and alloy tool steel.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

that as of June 30, 1985, due to a combination of lower inventories and increased unfilled orders.

Certain stainless and alloy tool steel.—U.S. producers' unfilled orders (principally sheets and strip) were 155,000 tons as of June 30, 1986, which compares to inventories of 242,000 tons (app. D, table D-2). The ratio of inventories to unfilled orders was 29 percent greater than that as of June 30, 1985, due to a combination of reduced unfilled orders and increased inventories. The sharpest increase occurred in the ratio for stainless steel wire, principally due to significant growth in inventories.

The U.S. importers who responded to the Commission's questionnaire reported imports of 225,000 tons of certain stainless and alloy tool steel products (\$392.7 million) during July 1, 1985–June 30, 1986, which represented approximately 82 percent of total imports. Unfilled orders were 30,000 tons as of June 30, 1986, which compares to inventories of 12,000 tons (app. D, table D-2). The ratio of inventories to unfilled orders was 70 percent lower than that as of June 30, 1985, due largely to a sharp decline in inventories. These ratios declined for all product categories except stainless steel plates.

Labor conditions

The review of labor conditions in the steel industry contains basic information about employment levels, labor costs, wage rates, and productivity in the United States, as well as comparisons with foreign steel producers in certain key areas. In addition to the information collected through the Commission's surveys, other data sources have been used to help put recent developments in a broader context.

Survey results.—Responses to the Commission's survey indicate that employment of production and related workers fell by 7 percent, to 175,000 during July 1, 1985–June 30, 1986 (1985/86) from 188,000 during July 1, 1984–June 30, 1985 (1984/85) (table 4). The greatest declines occurred in rails and related products and pipe and tube product areas. Employment levels in the sheet and strip product area are still the highest (35 percent of the total), followed by basic steelmaking (20 percent of the total).

Productivity levels rose significantly during 1985/86. In the carbon steel sector, for example, productivity rose by about 10 percent as the manhours required per ton of shipments fell from 5.7 in 1984/85 to 5.2 in 1985/86. The greatest relative gains occurred in the stainless and alloy tool steel plates and pipes and tubes product areas, where productivity increased by 29 percent and 27 percent, respectively.

Wage levels rose by an average of 4 percent during 1985/86. The greatest increases occurred in the structural shapes and units and pipe and tube product areas. The increases were not experienced in all areas, however, as wages in stainless and alloy tool steel operations fell by an average of 7 percent. Overall, wages ranged from \$12.45 to \$15.97, with the average at \$15.54. The highest wage levels were recorded in ironmaking and in the sheets and strip product area.

Employment trends in the United States.—In general, total employment and hours worked have declined over the past 10 years (figure 1). That trend continued in 1985 and 1986. The American Iron and Steel Institute reported that the number of workers fell from 236,000 in 1984 to 208,000 in 1985, and then to 189,000 during January–May 1986. Employment in the steel industry has

Table 4.--Certain carbon and alloy steel: U.S. producers' employment, productivity, and wage costs by sector
July 1, 1984 - June 30, 1985 (1984/85) and July 1, 1985 - June 30, 1986 (1985/86)

Item	Average Number Employed			Productivity Index 1/			Hourly Wage Costs		
	1984/85	1985/86	Change	1984/85	1985/86	Change	1984/85	1985/86	Change
Carbon and certain alloy steel: 2/			(percent):			(percent)			(percent)
Cokemaking facilities.....	13,096	10,977	-16.2	100	102	2.1	\$14.99	\$15.85	5.8
Ironmaking facilities.....	10,249	8,961	-12.6	100	108	7.6	15.27	15.90	4.1
Steelmaking facilities 3/.....	34,672	34,990	0.9	100	96	-3.9	14.87	15.57	4.7
Products:									
Sheets and strip.....	63,123	60,436	-4.3	100	113	13.2	15.34	15.97	4.1
Plates.....	7,558	7,061	-6.6	100	101	1.2	14.91	15.79	5.9
Bars.....	19,039	17,709	-7.0	100	116	16.2	14.40	14.82	2.9
Structural shapes and units.....	6,647	6,157	-7.4	100	126	26.3	13.17	15.00	13.9
Pipe and tube.....	13,618	10,332	-24.1	100	104	4.2	14.18	14.28	0.7
Rails and related products.....	1,260	952	-24.4	100	93	-6.5	13.60	13.67	0.5
Wire rod, wire, and wire products..	5,801	4,816	-17.0	100	115	15.1	14.07	15.11	7.4
Total.....	175,063	162,391	-7.2	4/	4/	4/	14.89	15.56	4.5
Stainless and alloy tool steel:									
Steelmaking facilities 3/.....	5,647	5,823	3.1	100	100	0.1	16.05	15.73	-2.0
Products:									
Plates.....	1,258	1,100	-12.6	100	129	28.8	16.43	15.46	-5.9
Sheets and strip.....	4,991	4,670	-6.4	100	87	-12.7	17.53	15.28	-12.8
Wire.....	736	700	-4.9	100	103	3.0	13.86	14.05	1.4
Pipes and tube.....	540	458	-15.2	100	127	26.6	13.10	12.45	-5.0
Total.....	13,172	12,751	-3.2	4/	4/	4/	16.39	15.31	-6.6
Grand total.....	188,235	175,142	-7.0	4/	4/	4/	14.99	15.54	3.7

1/ Calculated on the basis of production per manhour, except for the carbon and certain alloy sheets and strip, bars, and wire product categories, which are calculated on the basis of shipments per manhour.

2/ Certain alloy steel refers to alloy steel other than stainless and alloy tool steel.

3/ Including semifinished steel.

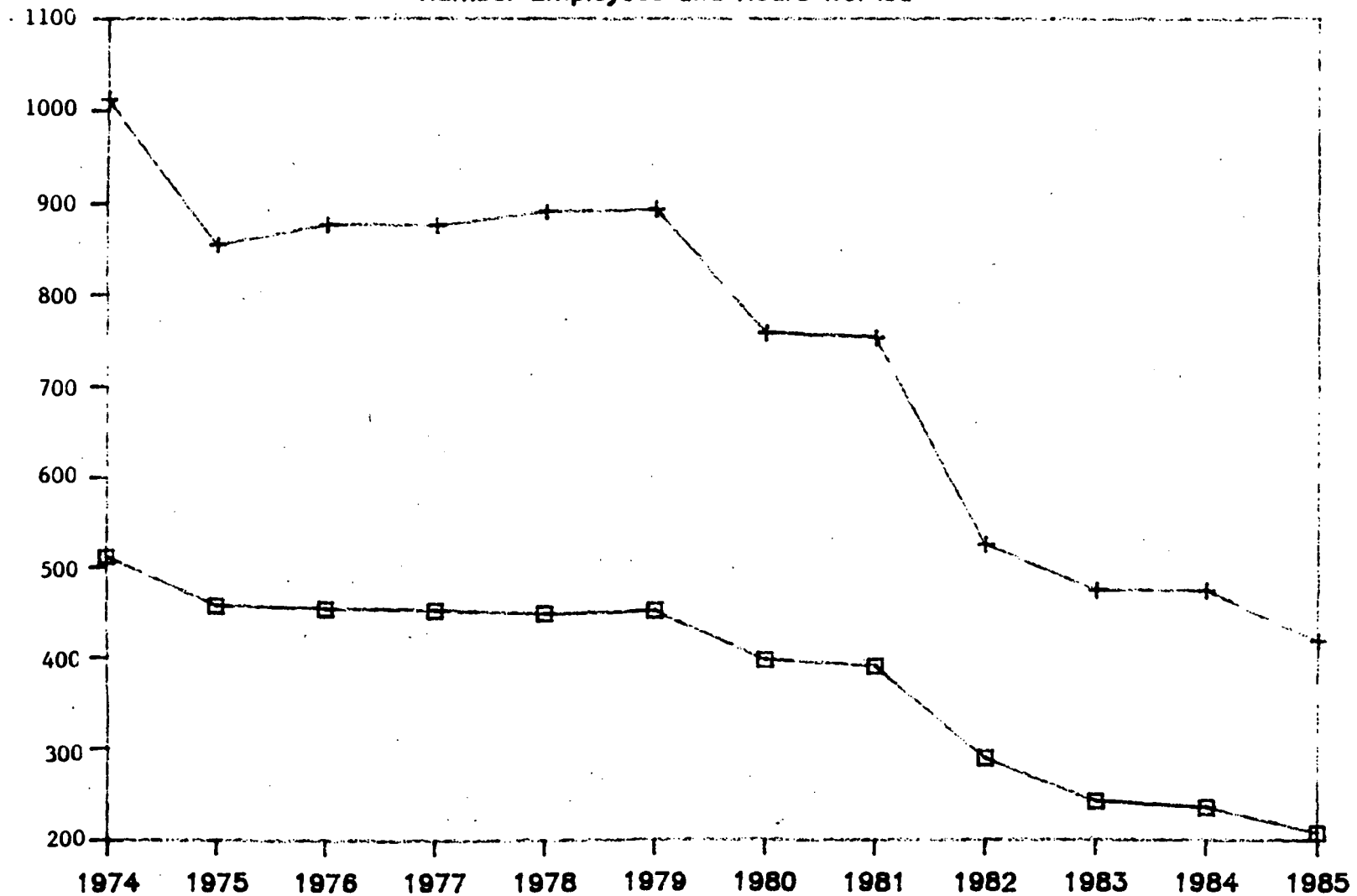
4/ Not applicable.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Figure 1

Iron & Steel Average Employment

Number Employees and Hours Worked



Source: AISI Annual Statistical Report
□ Avg. emp. (000) + Hours (000,000)

fallen by 50 percent in the last five years, and is currently declining monthly. Total hours worked have followed a similar pattern. Average hours worked per week, however, has risen consistently since 1981, when it averaged 37 hours per week; by 1985 the average had risen 4 percent to 38.7 hours per week.

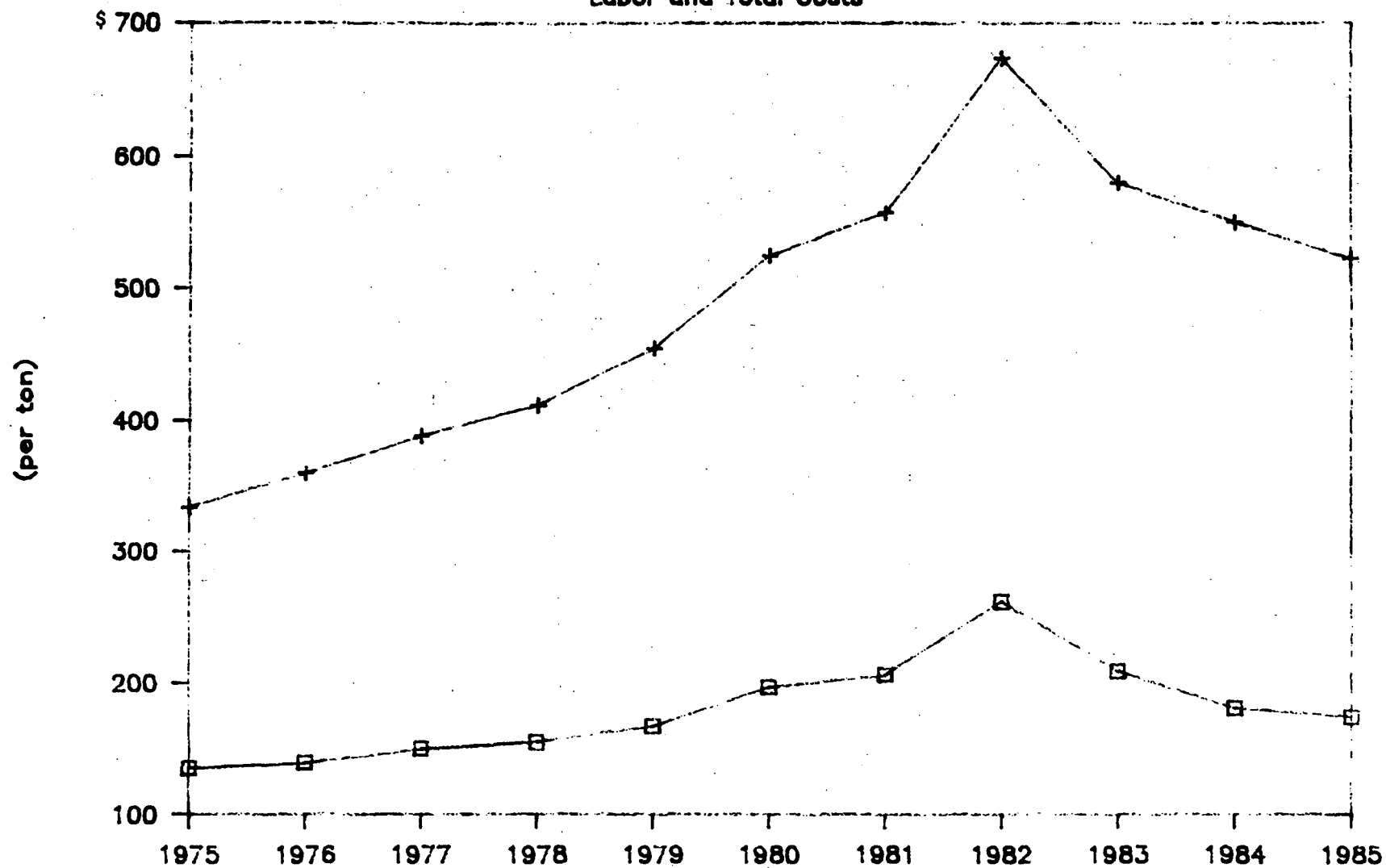
Total employment costs per unit of production are reported to have declined in the past several years, as has the share of labor costs to total costs (figure 2). The decline in costs reflects the fact that productivity gains have exceeded increases in compensation, which peaked in 1982 at \$22.72 per hour before declining in 1983 and 1984 to \$20.48. This decline was reversed in 1985, with an increase to \$21.47. The increase reflected scheduled cost of living increases that were negotiated in 1983. Wage rates in 1986 should decrease somewhat, as the current round of labor negotiations has resulted in reductions for every major producer that has reached settlement with its workers.

International comparisons.—Hourly compensation has been higher in the United States than in any other country during the past decade (figure 3). The depreciation in the U.S. dollar and increases in U.S. productivity, however, have reportedly improved the relative position of the United States. Since 1982, U.S. productivity has increased sharply, and is currently at its highest level ever (figure 4). The current level reportedly compares favorably with that in other major steel producing countries. As shown in the following tabulation, manhours per short ton shipped was 6.78 in the U.S. and 7.68 in Japan in 1985, when computed on the basis of actual operating rates.

Figure 2

U.S. Carbon Steel Production Costs

Labor and Total Costs



Source: World Steel Dynamics

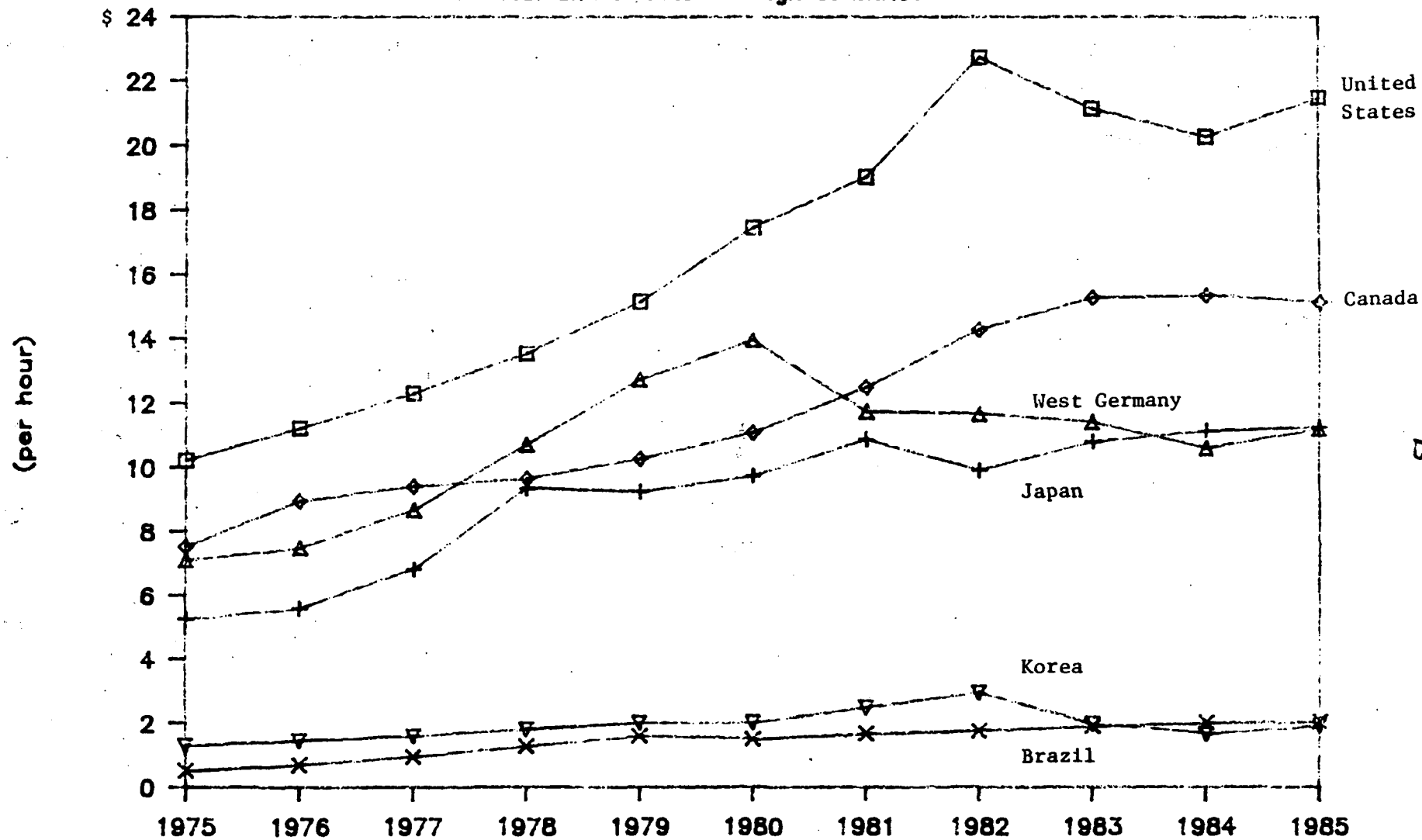
□ labor costs

+ total cost

Figure 3

Compensation in the Steel Industry

U.S. and selected foreign countries

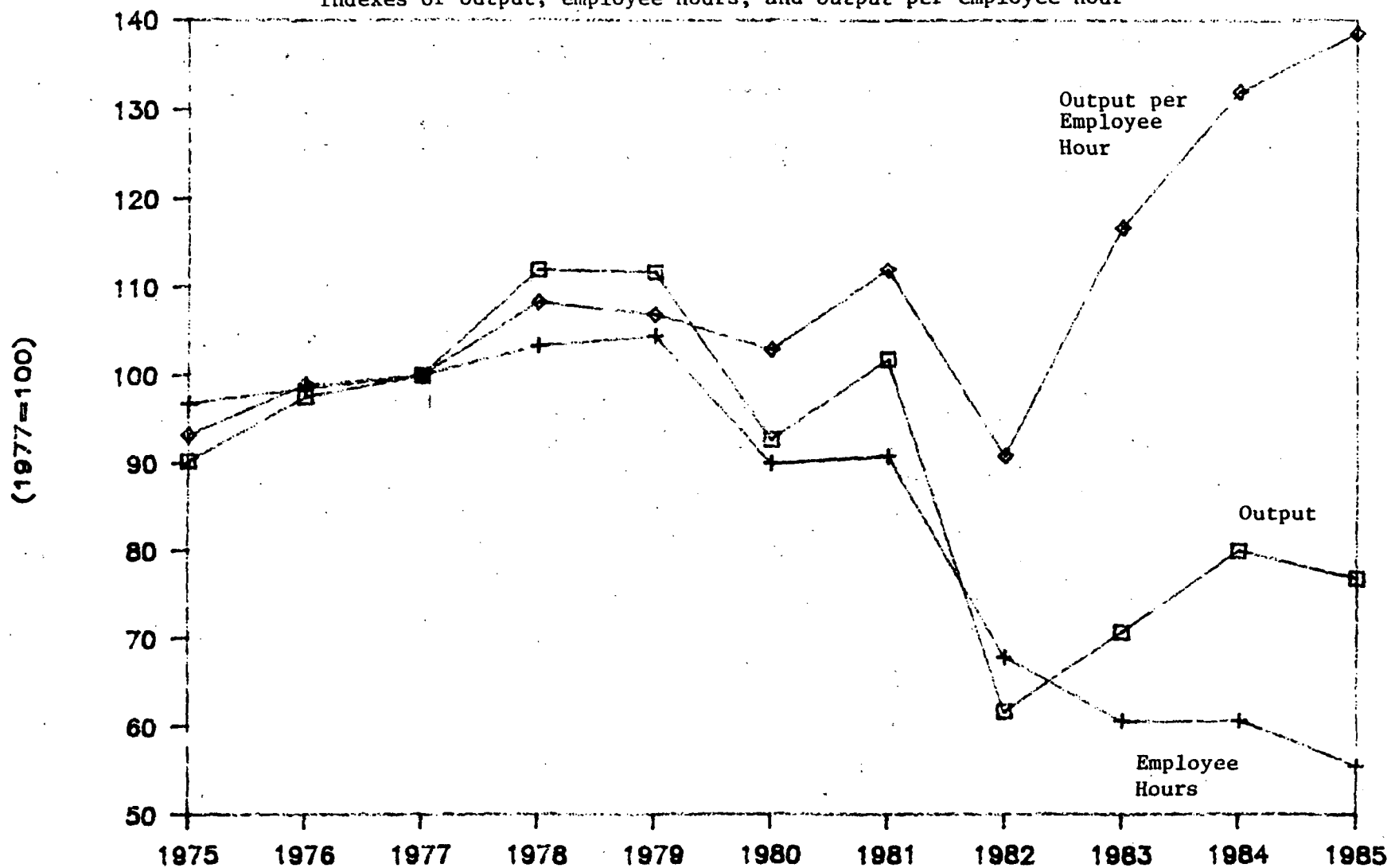


Source: U.S. Bureau of Labor Statistics

Figure 4

U.S. Carbon Steel Industry

Indexes of output, employee hours, and output per employee hour



Source: U.S. Dept. of Labor, April 86

If adjusted to a standard operating rate of 90 percent, U.S. productivity ranks third, behind Japan and the United Kingdom.

Major mills' manhours per short ton shipped

	Actual Operating Rate			Standard Operating Rate		
	1975	1981	1985	1975	1981	1985
United States	11.33	9.01	6.78	10.75	8.85	6.32
Japan	10.31	8.60	7.68	9.56	6.51	5.69
Germany	11.89	9.24	7.30	8.80	7.06	6.74
U.K.	22.83	13.01	8.08	17.56	9.04	6.00
France	16.16	9.88	8.51	14.67	8.99	7.54

Source: World Steel Dynamics.

Labor Negotiations

Background.—The 1986 negotiations between the United Steelworkers of America (USWA) and the steel industry were different in several respects from previous years. First, the negotiations occurred after Wheeling-Pittsburgh Corporation filed for protection under U.S. bankruptcy laws in April 1985. Upon reorganization, the management of the company unilaterally invalidated the labor contract, imposed a \$6.00 per hour wage cut, and abolished work rules and other parts of the contract. A 98 day strike by the Steelworkers occurred in August 1985, leading to a new round of negotiations with the company. Eventually, the Steelworkers settled on a new contract that included a reduction in wages and benefits of over \$3.00 per hour, leaving the company with total hourly employment costs of approximately \$18.40 per hour. This cost can be compared to reported employment costs that averaged \$21.47 for all companies in 1985.

Second, for the first time in 30 years, the Coordinating Committee that allowed the steel industry to bargain as a unit with the Steelworkers was not

in operation. Companies negotiated separately in an attempt to reach settlements tailored to the needs of each company. The steelworkers announced that they would consider concessions with companies which exhibited financial distress, conditioned on a free and open examination of the company's financial records and an agreement that other interested parties (i.e., the banks and the company) would also share in the sacrifice. ^{1/} Also of note, the Experimental Negotiating Agreement, under which companies and the union agreed not to strike was not in force, allowing the possibility of a strike.

Current negotiations.—Under contracts negotiated in the last 30 years (prior to 1986), wage levels were set uniformly throughout the industry, and similar levels of fringe benefits were granted for all companies. But due to the different numbers of retired workers, and other differences, the total hourly employment cost (THEC) among companies varied widely, from \$22 to \$26 prior to the 1986 negotiations. In 1986, however, with the breakup of unified bargaining, the differences in the THEC for all companies have significantly narrowed.

Two different types of contracts emerged. The first consisted of relatively sizeable wage and benefit reductions that were accompanied by profit sharing and stock distribution plans. Under this type of contract, the workers' take-home pay was reduced but concessions were offered in return. LTV, Bethlehem, and Inland's contract followed this pattern. The second type was quite different from the first, and consisted of smaller wage reductions but included an employment security

^{1/} American Metal Market, December 15, 1985.

plan whereby all workers were given job guarantees. In exchange, the union guaranteed assistance and cooperation in reducing the work force by a significant margin in future years. Conceptually, this contract was more of a "Japanese" style contract than has been seen in the steel industry before. To date only National Steel, fifty percent of which is owned by a Japanese steel company (Nippon Kokkan K.K.), has reached this type of settlement. In addition, all contracts have included provisions for the elimination of the cost of living adjustment (COLA).

As in 1983, wage and benefit rollbacks have been common. The following is a summary of the status of contract negotiations, and changes in hourly compensation (including benefits) which have occurred, as reported in the press.

Company	Status	Compensation/hour		Reduction (per hour)
		New	Expiring	
LTV	Effective 4/1/86	\$21.59	\$25.19	\$3.60
National	Effective 4/28/86	\$22.21	\$23.72	\$1.51
Bethlehem	Effective 7/1/86	\$22.50	\$24.84	\$2.34
Inland	Effective 8/1/86	1/	1/	1/
U.S. Steel	Contract expires 7/31/86	1/	1/	1/
Armco	Contract expires 9/30/86	1/	1/	1/

1/ Not available

Source: American Metal Market.

* * * * *

* * * * *

In general, the reduced compensation has taken the form of reductions in hourly wages paid as well as reductions in holidays and Sunday premium bonuses. Some reductions in insurance costs have reportedly been achieved through modifications in accounting practices as opposed to actual reductions in benefits. 1/

In addition to compensation, of particular concern to the Steelworkers, and an issue that has reportedly been settled to their satisfaction in every case, was the issue of the contracting out of work. Companies, particularly in the last three years, but for much longer in some form, have found it less costly to contract out for additional workers than to recall laid off steelworkers. Under the current contracts, language that forbids many kinds of contracting out was adopted; the contracts indicate that work capable of

1/ Discussion with officials of the USWA.

being performed by union members shall be performed by them, thereby limiting the ability of companies to contract out. 1/

Review of Settlements.—The following is a review of the settlements reached with four of the six largest integrated producers. A summary of wage and benefit reductions is presented in table 5.

LTV Corporation.—As the first of the major integrated producers to settle with the Steelworkers, the LTV contract set a pattern for negotiations in other companies. Because the company was in serious financial difficulty and due to the fact that LTV carries high pension costs and overall wage and benefit rates, substantial wage and benefit reductions were agreed upon. Overall, total hourly employment costs were reduced by \$3.60 during the first year of the contract. Of that total, \$3.15 will be made up to workers in the form of a profit sharing and stock ownership plan during the 3 years the contract is in effect.

National Steel Corporation.—The National Steel settlement differed in several ways from LTV's in that an employment security plan was instituted to guarantee jobs in exchange for union assurances of assistance in reducing the size of the work force. The agreement reduced hourly employment costs by \$1.51, but guaranteed an annual cash giveback of \$0.50 per hour worked during the preceding year. Overall, the total hourly employment cost was reduced by \$1.01.

1/ USWA Summaries of proposed agreements for National, Bethlehem, Inland, and LTV Steel Companies.

Table 5.--Summary of major wage and benefit reductions, 1986 negotiations between the USWA and selected major steel producers

Item	LTV Co.	National	Bethlehem	Inland
Wages and fringe benefits:				
Wages:				
Reduction in current wage rates	1.14	0.31	1/	0.00
Elimination of scheduled wage increases	0.72	0.11	1/	0.00
Total wage reductions:	1.86	0.42	0.98	0.00
Payroll fringe benefits:				
Reduction and changes in shift premiums	0.40	0.49	1/	1/
Reduction in holidays and vacations	0.56	0.00	1/	1/
Eliminate COLA	0.20	0.08	1/	1/
Total payroll fringe benefit reductions:	1.16	0.57	0.98	0.40
Total wage and fringe benefit reductions:	3.02	0.99	1.96	0.40
Insurance:				
Reduction in benefits:	0.13	0.00	1/	0.00
Cost containment measures	0.24	0.12	1/	0.00
Total insurance reductions:	0.37	0.12	0.25	0.00
Supplemental unemployment benefits (SUB):				
Lower contributions	0.00	0.25	0.00	0.00
Reduce SUB overfunding	0.00	0.15	0.00	0.00
Total SUB reductions:	0.00	0.40	0.00	0.00
Tax changes				
Reduction in FICA payments	0.21	0.00	0.13	0.00
Other changes	0.00	0.00	0.00	+0.40
Guaranteed annual payments:	0.00	+0.50	0.00	0.00
Total labor cost reduction:	3.60	1.01	2.35	0.00

1/ Not provided

Source: United Steelworkers of America

Bethlehem Steel Corporation.—The Bethlehem agreement was similar to the agreement at LTV, with smaller overall reductions at Bethlehem (see table 5 for details).

Inland Steel Corporation.—Of the companies to reach agreement so far, the Inland settlement contained the smallest cost reductions. Overall, reductions were offset by increases, reportedly resulting in no overall change in employment costs. Before the negotiations, Inland had the lowest cost structure of the six largest producers, due to a relatively young work force and low overall pension costs. Reductions in wages and benefits in other companies brought them all into line with Inland's overall costs.

U.S. producers' capital expenditures and research and development expenditures 1/

Carbon and certain alloy steel.—Capital expenditures for carbon and certain alloy steel operations totaled \$1.8 billion during July 1, 1985–June 30, 1986 (1985/86), representing a decrease of 24 percent from the expenditure level of \$2.4 billion achieved during July 1, 1984–June 30, 1985 (1984/85) (table 6). In both years, primary steelmaking (including ironmaking, cokemaking, and semifinished steelmaking facilities) accounted for the largest share of total capital expenditures (57 percent in 1984/85 and 55 percent in 1985/86), although actual expenditures in this area fell by 26.7 percent from 1984/85 to 1985/86. Increases in capital expenditures were recorded in sheets and strip (an increase of 115 percent from 1984/85 to

1/ Detailed data on U.S. producers' capital expenditures and research and development expenditures during July 1, 1985–June 30, 1986 are presented in app. D. Final data on such expenditures during July 1, 1984–June 30, 1985 are contained in app. H.

Table 6.--Certain carbon and alloy steel: U.S. producers' capital expenditures and research and development expenditures, July 1, 1984 - June 30, 1985 (1984/85) and July 1, 1985 - June 30, 1986 (1985/86)

Item	Capital Expenditures			Research and Development		
	1984/85	1985/86	Change	1984/85	1985/86	Change
	---1,000 dollars---	(percent)		---1,000 dollars---	(percent)	
Carbon and certain alloy steel: 1/						
Cokemaking facilities.....	82,816	77,456	-6.5	7,883	3,734	-52.6
Ironmaking facilities.....	167,159	141,862	-15.1	5,956	3,097	-48.0
Steelmaking facilities 2/.....	1,128,865	790,689	-30.0	22,221	30,505	37.3
Products:						
Sheets and strip.....	231,255	496,422	114.7	51,033	38,520	-24.5
Plates.....	***	***	41.1	6,994	4,417	-36.8
Bars.....	332,243	121,351	-63.5	8,147	3,477	-57.3
Structural shapes and units.....	139,851	57,564	-58.8	***	***	-20.5
Pipe and tube.....	171,924	56,109	-67.4	7,946	9,845	23.9
Rails and related products.....	***	***	94.7	***	***	-7.5
Wire rod, wire, and wire products..	105,924	18,860	-82.2	1,548	1,096	-29.2
Total	2,398,153	1,821,658	-24.0	113,872	96,411	-15.3
Stainless and alloy tool steel:						
Steelmaking facilities 2/.....	51,567	27,985	-45.7	***	***	100.6
Products:						
Plates.....	***	***	0.4	***	***	-17.8
Sheets and strip.....	36,048	25,220	-30.0	***	***	-61.2
Wire.....	***	***	15.7	***	***	0.3
Pipes and tubes.....	21,859	2,823	-87.1	***	***	-29.4
Total	132,007	80,407	-39.1	18,149	17,128	-5.6
Grand total.....	2,530,160	1,902,065	-24.8	132,021	113,539	-14.0

1/ Certain alloy refers to alloy steel other than stainless and alloy tool steel.

2/ Including semifinished steel.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission

1985/86), plates (up 41 percent), and rails and related products (up 95 percent). Capital expenditures declined during the period in the remaining four product categories, with decreases ranging from 59 percent in structural shapes and units to 82 percent in wire rod, wire, and wire products.

Producers' research and development expenditures during July 1, 1985–June 30, 1986 amounted to \$96.4 million, a decrease of about 15 percent from expenditures of \$113.9 million during July 1, 1984–June 30, 1985. Research and development expenditures declined in all areas except steelmaking facilities (including semifinished steel) and pipes and tubes. In both years, projects in the sheets and strip product area accounted for the largest share of research and development expenditures (44.8 percent in 1984/85 and 40.0 percent in 1985/86).

Certain stainless and alloy tool steel.—Total capital expenditures for the production of certain stainless and alloy tool steel products were \$80.4 million during July 1, 1985–June 30, 1986 (1985/86), a decline of 39 percent from expenditures of \$132.0 million during July 1, 1984–June 30, 1985 (1984/85) (table 6). The pipe and tube product category exhibited the largest relative decline in capital expenditures during the period, falling 87 percent from 1984/85 to 1985/86. Declines also occurred in steelmaking facilities (down 46 percent) and sheets and strip (down 30 percent). In contrast, expenditures for stainless steel wire products rose 16 percent during the period.

Spending for research and development also declined, falling 6 percent from \$18.1 million during July 1, 1984–June 30, 1985 to \$17.1 million during July 1, 1985–June 30, 1986. Declines, which ranged from 18 percent to 61

percent, occurred in most product categories. There was a significant increase in R and D spending for steelmaking facilities, which doubled during the period.

Financial experience of U.S producers

During the 12-month period ending June 30, 1986, sales of steel products totaled approximately \$28.6 billion, down 3.3 percent from sales in the preceding 12-month period. Net losses occurred in most product categories, as overall losses as a percent of sales rose from -3.2 to -3.9 percent (table 7).

The financial community has responded to unfavorable financial conditions in the industry in recent years by progressively downgrading the ratings assigned to companies on certain financial instruments, such as bonds. Table 8 lists Moody's bond ratings for the top six U.S. steel producers. The ratings are an indication of the confidence certain financial institutions place in the investment quality of debt instruments issued by a company. The ratings are one of several factors which influence market price movements in a bond over its life. Generally, interest rates vary inversely to the bond ratings. While all bonds are rated individually, for a single company, ratings are usually the same on all bonds of the company issued in the same rating period. The major exceptions to this rule are subordinated debentures of a company, which are rated lower than its bonds.

The Moody's ratings indicate a deterioration in almost all companies' standings since January 1985. Two companies are rated as having medium-grade obligations, which are neither highly protected nor poorly secured, while the

Table 7.--Certain carbon and alloy steel: Total net sales and net profits and losses as a percentage of sales, by selected product, July 1, 1984 -- June 30, 1985 (1984/85) and July 1, 1985 -- June 30, 1986 (1985/86)

Item	Total net sales 1/		Net change in sales	Net profit or loss as a percent of sales 2/		Net change in percentage
	1984/85	1985/86		1984/85	1985/86	
	---thousands of dollars---		(percent)			
Carbon and alloy steel: 3/						
Semifinished.....	287,905	426,757	48.2	(11.3)	(27.2)	(15.9)
Plates.....	1,644,975	1,471,992	(10.5)	(5.9)	(9.7)	(3.8)
Sheets and strip.....	15,813,586	16,748,727	5.9	(0.6)	(1.6)	(1.0)
Bars.....	4,208,329	3,571,239	(15.1)	(5.0)	(6.4)	(1.4)
Wire, wire rod & wire products..	1,511,371	1,434,071	(5.1)	(4.2)	(0.7)	3.5
Structural shapes and units.....	1,376,896	1,576,190	14.5	(8.7)	(2.8)	5.9
Rails and related products.....	496,831	334,834	(32.6)	(2.0)	(4.1)	(2.1)
Pipes and tubes.....	2,202,496	1,662,306	(24.5)	(17.7)	(17.6)	0.1
Subtotal, carbon and certain alloy steel.....	27,542,389	27,226,116	(1.1)	(3.7)	(4.1)	(0.4)
Certain stainless and alloy tool steel:						
Semifinished.....	188,324	160,115	(15.0)	1.6	(3.3)	(4.9)
Stainless steel:						
Plates.....	325,438	225,839	(30.6)	0.0	(16.9)	(16.9)
Sheets and strip.....	1,379,279	846,418	(38.6)	6.5	5.9	(0.6)
Wire.....	99,524	95,996	(3.5)	6.2	4.1	(2.1)
Pipes and tubes.....	91,241	79,720	(12.6)	(17.0)	(2.1)	14.9
Subtotal, certain stainless and alloy tool steel.....	2,083,806	1,408,088	(32.4)	4.0	0.6	(3.4)
Grand total.....	29,626,195	28,634,204	(3.3)	(3.2)	(3.9)	(0.7)

1/ Includes intracompany and intercompany transfers, less discounts, returns, and allowances.

2/ Net profit is defined as the total net sales, less the cost of goods sold, general, selling and administrative expenses, and other expenses (such as net interest expense (or income)).

3/ Certain alloy refers to alloy steel other than stainless and alloy tool steel.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 8.— Moody's bond ratings 1/ 2/ of selected U.S. steel producers, 1980-1986

	Feb. 1980	As of January —			1983	1984	1985	1986	June 1986
Integrated			3/						
Armco	A	A	A	A2	Baa2	Baa3	Ba2	Ba2	
Bethlehem	A	A	A	Baa2	Baa2	Ba1	Ba1	Ba2	
Inland	Aa	A	A	Baa2	Baa2	Baa2	Baa2	Baa3	
J & L <u>4/</u>	Ba	Ba	Ba	Ba1	Ba1	Ba1	B3	B2	
National	Aa	A	A	Baa3	Ba1	Ba1	B3	B3	
Republic <u>4/</u>	A	A	A	Baa3	Ba1	Ba1	B3	B3	
U.S.S.	Aa	A	A	A3	Baa2	Baa2	Baa2	Baa2	
LTV <u>4/</u>	<u>5/</u>	<u>5/</u>	<u>5/</u>	<u>5/</u>	<u>5/</u>	B1	B1	B1	

1/ Moody's bond ratings are as follows:

- Aaa: Best quality and carry smallest degree of risk.
- Aa: High quality and together with Aaa, are known as high-grade bonds.
- A: Possess many favorable investment attributes and are considered upper-medium grade obligations.
- Baa: Medium-grade obligations which are neither highly protected nor poorly secured.
- Ba: Obligations which have speculative elements; future cannot be considered well assured.
- B: Generally lack characteristics of desirable investment.
- Caa: In poor standing; may be in default or may present elements of danger with respect to principal or interest.
- Ca: Speculative in a high degree.
- C: Lowest rated bonds.

2/ Bond ratings of subordinated debentures are not shown. These ratings have historically been one rating below the ratings shown above.

3/ In 1983, Moody's modified its ratings. The numbers place the bond's rating within the alphabetic rating. 1 is preferable to 2, which is preferable to 3.

4/ During 1984, Jones and Laughlin (J & L) and Republic merged to form LTV Steel, under the corporate umbrella of LTV Corp.

5/ Not applicable.

Source: Moody's Bond Record, Moody's Investors Service, Inc., various editions.

others are rated as having obligations which either have speculative elements, or lack characteristics of desirable investment.

The serious financial problems confronting the industry are also reflected in the fact that within the study period, nine U.S. steel producers have either ceased operations or filed for protection from creditors under Chapter 11 of the federal bankruptcy code. These firms are listed in the following tabulation:

<u>Filed under Chapter 11</u>	<u>Date</u>
Roblin Industries	July, 1985
Continental Steel Corp.	November 25, 1986 ^{1/}
Eastmet Corp.	January 6, 1986
Enduro Stainless Corp.	February 21, 1986
 <u>Shut down</u>	
Kentucky Electric Steel Co.	August 2, 1985
Hurricane Industries	September, 1985
Green River Steel	November 30, 1985
 <u>Shut down and liquidated</u>	
Marathon Steel	June 14, 1985
Soule Steel	February 18, 1986

^{1/} Changed filing to Chapter 7, February 25, 1986.

The firms which filed under Chapter 11 during the period joined Wheeling-Pittsburgh, which took similar action in April, 1985. Phoenix Steel, which filed in late 1983, was purchased by Guardian Industries and emerged from protection in August, 1985.

Of the four firms which filed under Chapter 11 during the current study period, two (Roblin and Continental) cited the costs of financing debt incurred in modernization programs as contributing to their failure. ^{1/}

^{1/} Minerals and Materials, Bureau of Mines, Department of Interior, February/March, 1986, and discussions with Roblin personnel during plant tour.

Roblin also reported that imports in their product lines affected their decision. 1/ While Roblin is still producing steel and attempting to restructure its debt, Continental is being liquidated in order to satisfy creditors. Enduro Stainless Steel is another steel firm burdened by the weight of its debt, the magnitude of which exceeds the value of its tangible assets by over \$15 million. 2/ At the final company in this group, Eastmet Corp., steelmaking takes place in only one division, Eastern Stainless Steel. This division is reported to have been profitable after withdrawing from the sheet and strip markets, and there have been efforts to separate the division from its parent corporation. 3/ Eastmet has changed management in an effort to accomplish a successful restructuring.

Five firms have shut down steel production within the study period without filing for bankruptcy. Two of these firms, Marathon Steel and Soule Steel Company, are liquidating their assets. Marathon Steel's parent, the rebar fabricating firm Marathon Corp., indicated its action resulted from high operating costs, overcapacity in its geographical area and competition from imports, which lowered prices to a point where rebar became cheaper to buy than to make. 4/ Soule, a California producer of rebar, cited falling demand, overcapacity in its market, and imports as major factors depressing prices and prohibiting profitable operation. 5/ Green River Steel Corp. reportedly ceased operations primarily due to high costs and rising levels of

1/ Minerals and Materials, June/July, 1985.

2/ Metal Bulletin, "Enduro Bidders Quit", p. 31, May 23, 1986.

3/ Metal Bulletin, various issues.

4/ Minerals and Materials, June/July, 1985.

5/ Telephone conversation with Howard S. Soule, Soule Steel Co.

imports, but has not filed for bankruptcy or sold its assets. 1/ The fourth firm, Hurricane Industries Inc., was shut down, reportedly due to the poor condition and technological obsolescence of its capital equipment. On January 7, 1986, the company was purchased by a group of private investors who intend to renovate the plant, installing new equipment and repairing existing equipment. The group expects to re-open the facility in early 1987. 2/ Kentucky Electric Steel Co. officially closed down its plant in August of 1985. This action was taken while the union workforce was on strike, protesting management's desire to reduce wages and benefits * * * in an effort to cut costs. 3/

In July 1986, LTV Corp., a conglomerate involved in aerospace, defense, and energy products as well as steel, filed for protection under Chapter 11. The nation's second largest steel producer, LTV Steel was formed by the combination of three steel companies; Jones and Laughlin (1968), Youngstown Sheet and Tube (1978), and Republic Steel (1984). The company has attempted to phase out inefficient plants and combine efficient facilities to create a modern and profitable entity. However, heavy losses in the steelmaking division, which adversely affected cash flow, and large debt and pension obligations overwhelmed profitable operations in other divisions. According to company officials, the \$1.7 billion in scheduled debt repayments over the next 3 years and the \$375 million in annual pension obligations were primary factors in their decision to file for protection. 4/

1/ Information submitted in response to USITC survey.

2/ Information submitted in response to USITC survey.

3/ Information submitted in response to USITC surveys.

4/ "LTV Corp., Hurt by Steel Imports, Files Bankruptcy Petition," Washington Post, July 18, 1986.

The following is a review of the profit and loss performance of the industry in key product groups during the twelve month periods ending June 30, 1985 and June 30, 1986.

Carbon and certain alloy steel.— Total net sales of all carbon and certain alloy steel products subject to the investigation amounted to \$27.2 billion (table 7), a decrease from last period's \$27.5 billion. Net losses before taxes in the sector increased from \$1.0 billion to \$1.1 billion between the previous study period and the current one. 1/ As a result, losses as a percentage of sales increased from 3.7 to 4.1. Only two product areas, wire products and structurals showed significant positive movement, as losses as a percentage of sales narrowed from -4.2 to -0.7, and -8.7 to -2.8, respectively (table 7). While losses were recorded in all carbon and certain alloy product groups, the wire and related products group lost the least as a percentage of sales, 0.7 percent. Losses as a percentage of sales was greatest in semifinished products (27.2 percent) which also showed the greatest negative net change (15.9 percentage points).

Certain stainless and alloy tool steel.—Total net sales of certain stainless and alloy tool steel products amounted to \$1.4 billion (table 7), down 32 percent from the \$2.1 billion in net sales for the year ending June 30, 1985. Net profits before taxes in the sector fell from \$83 million to \$8.4 million between the previous study period and the current one. 2/ Net

1/ Detailed data on profit-and-loss during July 1, 1985-June 30, 1986 are presented in app. D. Final data on the July 1, 1984-June 30, 1985 period are contained in app. H.

2/ Detailed data on profit-and-loss during July 1, 1985-June 30, 1986 are presented in app. D. Final data on the July 1, 1984-June 30, 1985 period are contained in app. H.

profits as a percentage of sales decreased from 4.0 to 0.6, a net change of minus 3.4 percentage points (table 7). Plates showed the steepest decline in profitability, as well as the greatest net change, as the return on sales fell from 0.0 to -16.9; pipes and tubes showed the most improvement, as losses on sales declined from -17.0 percent to -2.1 percent. Sheets and strip maintained its position as the most profitable product category, although profits declined from 6.5 percent of sales during 1984/85 to 5.9 percent during 1985/86.

Steel pricing

Developing data on steel transaction prices presents significant difficulties due to the lack of publicly available information on the terms and conditions of sales, the numerous metallurgical and dimensional specifications to which steel products are sold (which permit few direct comparisons), and the sheer volume of transactions. Despite these problems it is nonetheless possible to develop insights into pricing dynamics through an examination of various data sources. For this analysis three such sources have been used: (1) pricing series developed by governmental agencies in selected countries; (2) data compiled by the Commission in response to questionnaires received from U.S. producers and importers; and, (3) information available from reports made on the industry, including press reports.

The analysis is divided into two parts. The first part examines pricing developments in five countries during 1981-85, using official government pricing series. The series are adjusted and re-examined in light of exchange rate changes to develop insights into how exchange rates affected relative

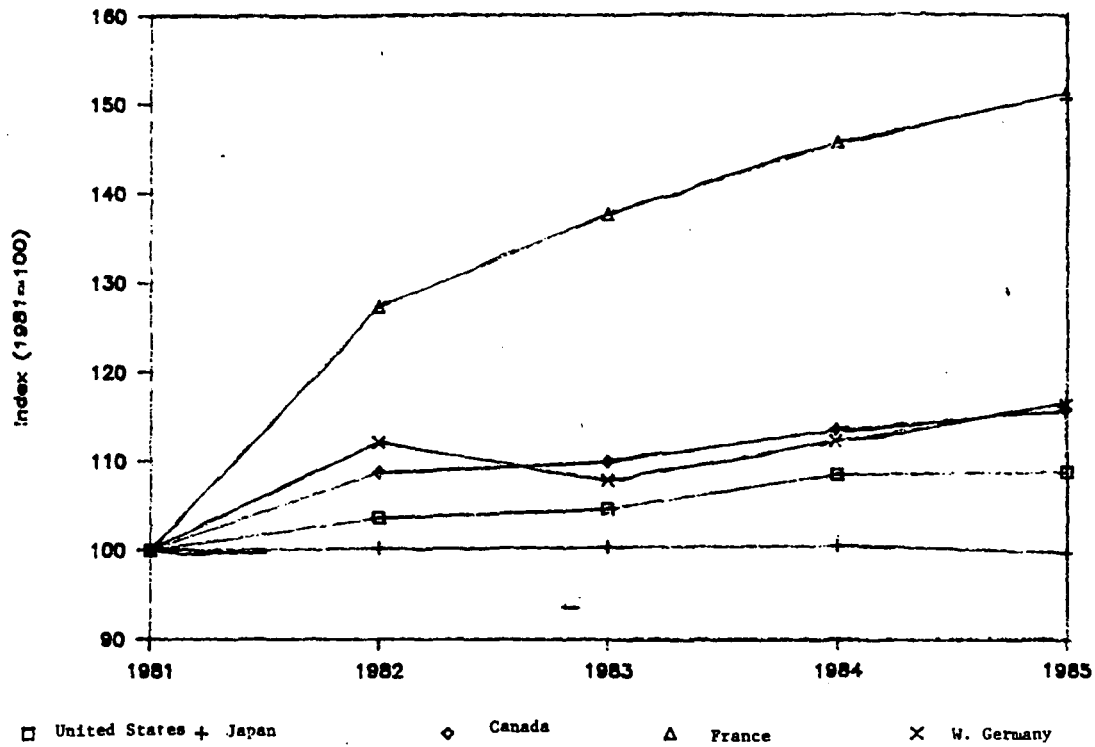
prices among the five countries. Disadvantages associated with the official statistics are that they may reflect list prices more so than transaction prices, and they do not indicate the magnitude of price differentials. These issues are addressed in the second part of the analysis, which draws together the pricing information collected by the Commission with that available from other sources.

Steel price index trends in five countries.—An examination of steel price index trends during 1981-85 in five major steel producing countries indicates significant variability in the rates of change among the countries. ^{1/} As shown in figure 5, home currency steel prices in France rose by about 50 percent in the 5-year period, while in Japan, domestic prices remained stable through 1984, before declining slightly in 1985. In the United States, domestic steel prices rose approximately 9 percent in the 5-year period, which was the second lowest overall change. Monthly price indexes for the last 6 months of 1985 indicate relatively stable prices in all five countries (figure 6).

In order to examine the effects of exchange rate fluctuations on relative prices in the five countries, government pricing series were adjusted to reflect not only percentage changes in home currency prices, but also percentage changes in currency values versus the U.S. dollar. Figure 7, which contains the adjusted data, shows that while steel prices were rising in the United States, steel prices in the four other countries were falling in dollar

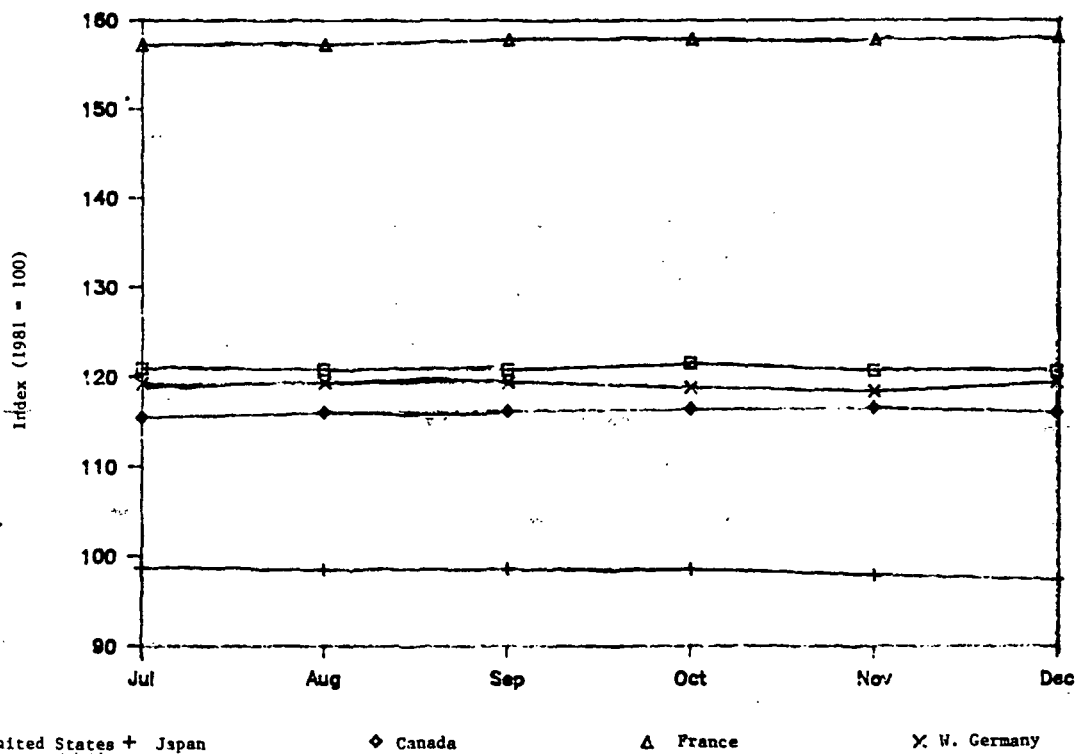
^{1/} Government published price indexes may reflect list prices rather than transaction prices.

Figure 5

Steel Price Indexes in Selected Countries,
1981-1985

Source: Price indexes of selected official government publications.

Figure 6

Steel Price Indexes in Selected Countries,
July-December, 1985

Source: Price indexes of selected official government publications.

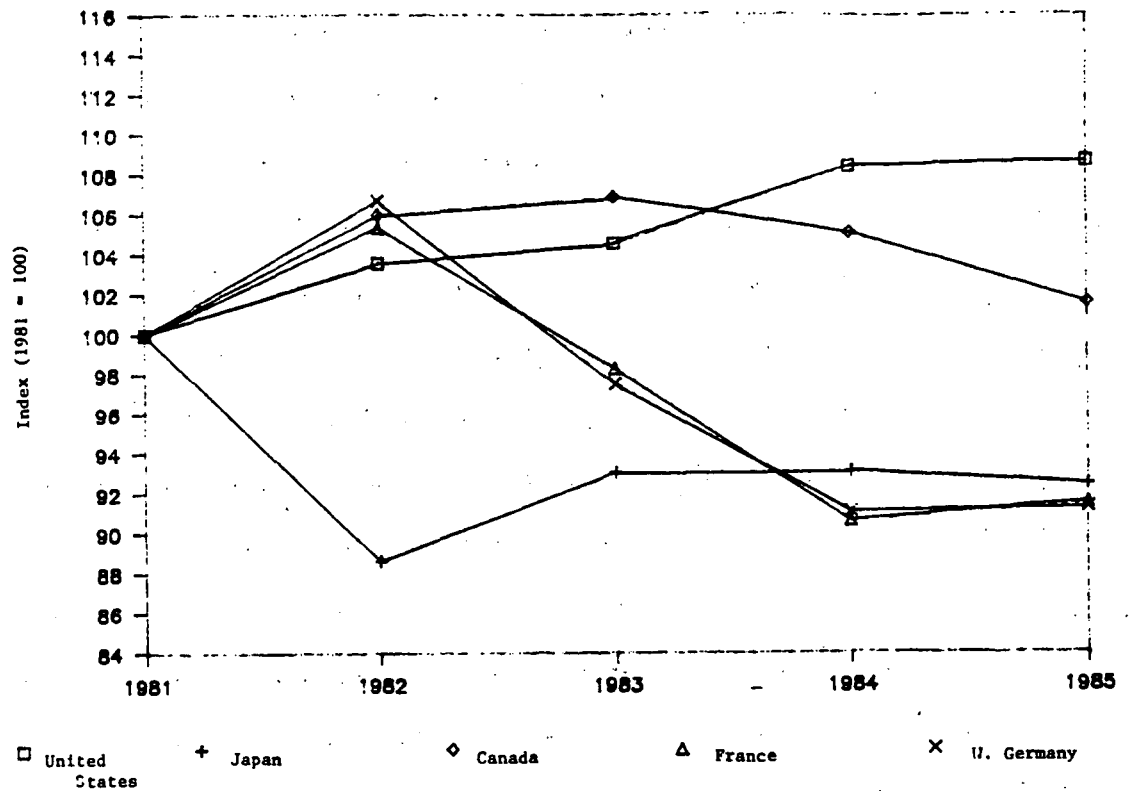
terms. In both France and Germany, the adjusted price indexes indicate a drop in domestic steel prices of approximately 15 percent between 1982 and 1984. By 1985 U.S. and Canadian steel prices were 9 percent and 2 percent above 1981 levels, respectively, while French, German, and Japanese steel prices were 7-9 percent below 1981 levels (figure 7). With the depreciation of the dollar during the second half of 1985, foreign adjusted monthly price indexes exhibited upward movement. By December 1985 most countries (excluding Canada) had price indexes in dollar terms 6-9 percent above 1981 levels (figure 8). The depreciation in the value of the dollar had therefore restored relative prices to their 1981 level for all countries except Canada, where prices were 99 percent of 1981 levels.

International pricing developments.—The international steel market has been highly competitive and volatile during the 1980's, with prices affected by significant shifts in demand, notable exchange rate fluctuations, and major restructuring efforts undertaken by producers worldwide. Western world demand for steel has fallen ten percent since the peak year of 1973, a decline which has been attributed in part to slower economic growth and declining steel intensity in steel consuming industries. ^{1/} Moreover, despite cuts in capacity by major steel producers, world steelmaking capacity has risen and remained above steel demand, with developing world producers continuing to expand effective capacity. Compounding the problems associated with the existing supply/demand imbalance have been exchange rate fluctuations, which

^{1/} World Steel Dynamics, "Factors Creating Change More Powerful than Business Cycles," June 24-25, 1986.

Figure 7

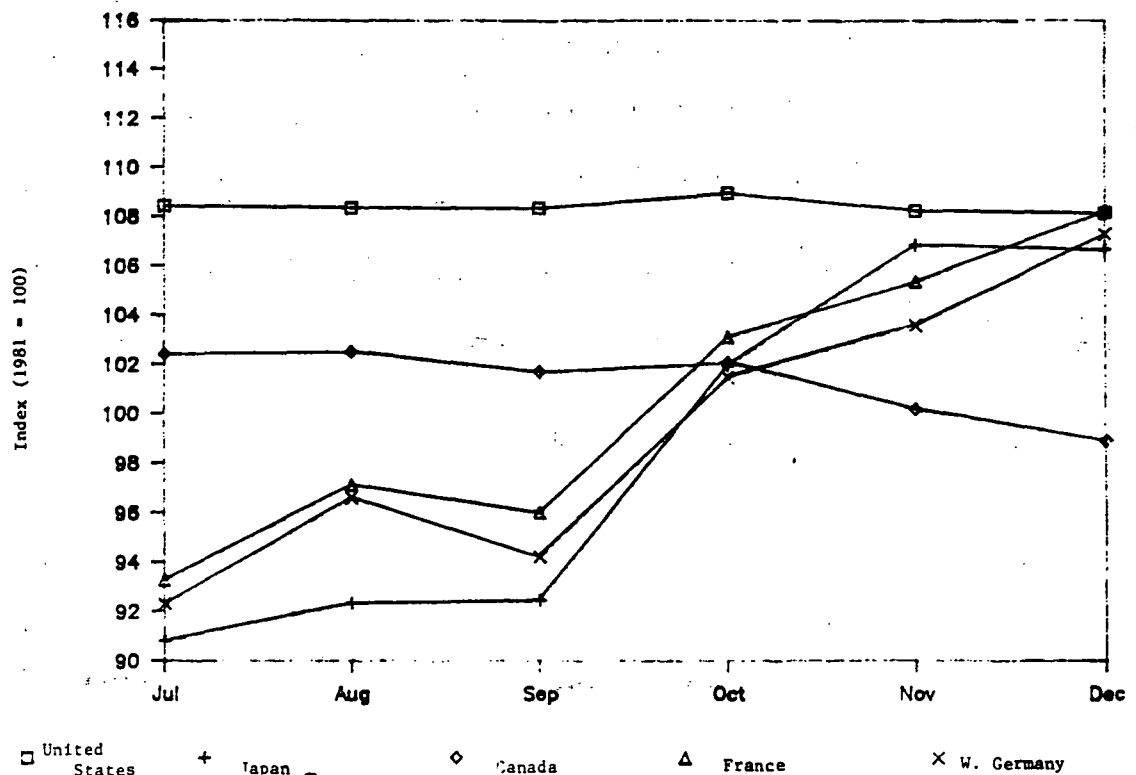
Steel Price Indexes in Selected Countries,
Adjusted for Exchange Rate Changes
1981-1985



Source: Price indexes of selected official government publications.

Figure 8

Steel Price Indexes in Selected Countries,
Adjusted for Exchange Rate Changes
July-December 1985



Source: Price indexes of selected official government publications.

have resulted in significant shifts in price and cost differentials among producers in different nations over relatively short periods of time.

With respect to international steel pricing developments, world steel "spot" export prices are reported to have declined in 1985, due largely to stagnating demand and rising exports by developing world producers. 1/ Steel market analysts report that steel mills in advanced developing world countries have become the world's low cost producers, with their lower costs largely the result of weakened currencies versus the dollar, "spot" market purchases of raw materials, and efforts at cost reduction. 2/ Moreover, these "newly-steel-active" countries (such as Argentina, Mexico, Venezuela, Brazil, South Africa, Taiwan, and South Korea) have taken an expanding portion of the export market. Whereas seven of these countries were net importers of 13 million short tons of steel in 1974, by 1985 the same seven countries were net exporters of 15 million tons. 3/

Following are brief summaries of steel pricing developments and conditions in the U.S., Japanese, Canadian, and European Community (EC) markets.

United States.— Price competition in the U.S. market has been particularly intense during the past several years, as evidenced by the degree to which domestic producers have offered discounts from list prices. Following

1/ World Steel Dynamics, "Factors Creating Change More Powerful than Business Cycles," June 24-25, 1986.

2/ Ibid.

3/ Ibid.

is a tabulation which indicates that by December 1985, discounts were as high as 31 percent off list price, up from 3.2 to 8.5 percent in 1981.

Percentage variation between U.S. list and "spot" prices 1/

<u>Period</u>	<u>Percent</u>
March 1981	-5.7
May 1981	-4.9
July 1981	-3.2
November 1981	-8.5
March 1982	-10.1
July 1982	-16.6
December 1982	-20.3
April 1983	-22.0
July 1983	-29.3
October 1983	-29.9
January 1984	-24.9
May 1984	-21.3
September 1984	-23.0
January 1985	-27.8
April 1985	-28.3
July 1985	-30.2
December 1985	-31.2
April 1986	-21.0

1/ Composite for five major products through January 1985; composite for four major products starting April 1985.

Source: World Steel Dynamics: Steel Price Track 18, April 15, 1986.

First and second quarter 1986 price developments, however, indicate firming market prices, as "spot" prices are reported to have been up in certain cases for the first time since 1984. Moreover, price discounts appear to have fallen from the December 1985 peak to 21 percent in April 1986,

reflecting both a reduction in list prices and an increase in transaction prices. 1/

With respect to international comparisons, steel prices in the United States have reportedly moved closer to steel prices abroad in recent months. The depreciation of the dollar relative to the yen and most European currencies has significantly narrowed (and in some cases reversed) the gap between domestic "spot" steel prices and those in other countries. After declining during 1984-85, domestic steel prices began to recover in 1986, when price pressure from imports reportedly eased. 2/

Composite price data, 3/ however, indicate that export prices to the United States were below domestic list and transaction prices during 1981-85 (figure 9). While list, transaction, and contract delivery (import) prices all exhibited an upward trend in the late 1970's, by 1981 both domestic transaction prices and contract delivery prices had fallen below published list prices. By 1985, the contract delivery price was approximately \$150 per ton below producer list price (23.7 percent), and \$15 per ton below domestic realization prices (3.3 percent). By the fourth quarter (1985), the difference between domestic realization prices and import prices had narrowed to approximately \$3.

In order to improve international competitiveness, domestic mills have continued with their efforts to reduce costs. Currently, because of these

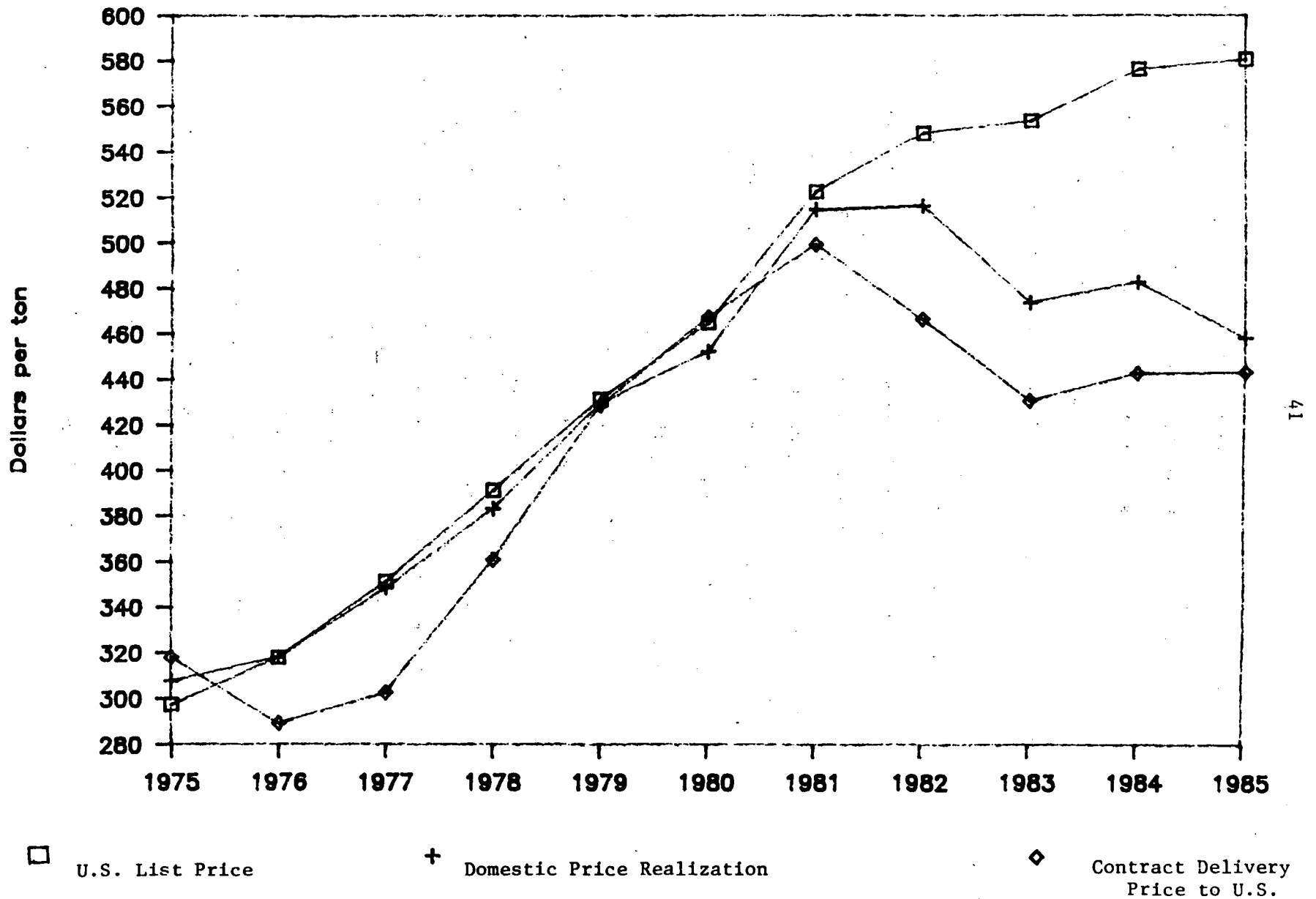
1/ World Steel Dynamics: Steel Pricetrack 18, April 15, 1986.

2/ World Steel Dynamics: Steel Pricetrack 17, December 9, 1985.

3/ World Steel Dynamics: Steel Strategist 12, June 9, 1986.

Figure 9

U.S. COMPOSITE DOMESTIC AND IMPORT PRICES



Source: World Steel Dynamics: Steel Strategist 12.

efforts and the depreciation of the dollar, the cost to produce steel in the United States is more competitive with costs in other industrialized countries. In U.S. dollar terms, domestic mills have reportedly reduced costs by ten percent since 1981; major mills' pretax cost is currently estimated to be about 1 percent lower than that in Japan, and 14 percent higher than West Germany. 1/

Although price increases announced by U.S. producers in the first and second quarters of 1986 appear to have been successful, steel market analysts indicate that prospects for further increases in prices are questionable. 2/ According to these analysts, third quarter prices are softening, which has been attributed to slackening demand from the automotive, capital equipment, energy, construction, and railroad industries.

The quarterly data collected by the Commission on steel prices during the July 1984-June 1986 period tend to support the analysis of recent pricing developments. The data indicate that domestic producer prices for many products declined during most of the period, with an upturn in the final quarter on which data were provided (April-June 1986). As shown in table 9, despite the upturn, many prices were still below their July-September 1984 level. An examination of importers' prices does not suggest any consistent pattern of increases or decreases, though a comparison of initial (July-September 1984) and final (April-June 1986) quarter prices reveals that prices in about half of the products were lower in the latter period. With respect to the differential between producer and importer prices, a comparison

1/ World Steel Dynamics, "Factors Creating Change More Powerful than Business Cycles," June 24-25, 1986, p. 31.

2/ World Steel Dynamics: Steel Pricetrack 18, April 15, 1986.

Table 9.--Certain carbon and alloy steel: Weighted average net prices for the three largest sales shipped by U.S. producers and importers, of selected products, by specified period 1/

(Per ton)									
Product 2/	Weighted average net price						Ratio of U.S. producer prices to importers' prices		
	U.S. producers			U.S. importers					
	July- September 1984	April- June 1986	Percent Change	July- September 1984	April- June 1986	Percent Change	July- September 1984	April- June 1986	
Carbon and certain alloy steel: 3/									
Plates.....	***	340.77	***	360.80	342.52	-5.1%	***	99.5	
Sheets and strip:									
Hot rolled.....	332.54	295.10	-11.3%	334.64	335.20	0.2%	99.4	88.0	
Galvanized.....	***	538.50	***	616.01	561.80	-8.8%	***	95.9	
Bars:									
Hot finished.....	315.04	305.65	-3.0%	384.22	304.16	-20.8%	82.0	100.5	
Reinforcing.....	279.96	285.17	1.9%	262.13	275.28	5.0%	106.8	103.6	
Wire rod.....	297.08	276.31	-7.0%	302.81	291.50	-3.7%	98.1	94.8	
Structural shapes and units.....	***	345.50	***	373.13	343.37	-8.0%	***	100.6	
Rails and related products.....	***	417.31	***	500.35	440.32	-12.0%	***	94.8	
Pipes and tubes:									
Oil country tubular goods.....	***	***	***	495.05	***	***	***	***	
Line pipe.....	***	463.34	***	***	427.51	***	***	108.4	
Certain stainless and alloy tool steel:									
Plates.....	***	2246.50	***	***	1915.89	***	***	117.3	
Sheets and strip.....	***	1607.14	***	1725.27	1629.95	-5.5%	***	98.6	
Wire.....	***	3571.42	***	***	4/	4/	***	4/	
Pipes and tubes.....	3502.01	***	***	2629.99	3076.09	17.0%	133.2	***	

1/ Prices are net of all discounts and allowances (including freight allowances) and excluding U.S. inland freight. Producers' prices are f.o.b. mill; importers' prices are f.o.b. warehouse, or, if shipped directly to customs, c.i.f., ex-dock, port of entry, duty paid.

Prices represent the total industry value of reported sales divided by the total quantity sold, based on the 3 largest sales of each firm.

2/ See Appendix E for description of products.

3/ Certain alloy refers to alloy steel other than stainless and alloy tool steel.

4/ No data reported.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

of initial and final quarter prices suggests that the two pricing series have tended to converge over time.

Following are brief summaries of pricing developments in the U.S. market in selected key product groups during recent months.

Sheet products.— Transaction prices for flat-rolled sheet products, reported to be \$100-\$140 off list prices (an estimated 23-29 percent) at the end of 1985, were reportedly successfully raised in the first and second quarters of 1986. 1/ In January 1986, published base prices of hot and cold rolled, and coated sheet were cut, as were discounts that had been offered. These two actions resulted in a common increase in transaction prices over fourth quarter 1985 prices of \$20-\$40 per ton (or approximately 4-14 percent). With strengthened "end-user" demand, declining imports, and increased steel orders "hedging" against possible labor strikes, second quarter transaction prices reportedly improved to \$10-\$15 per ton off list price; in certain cases, steel products received full book price. 2/

An additional price hike initiated in the spring reportedly failed to hold due to a decline in demand. Specific factors contributing to its failure included: (1) high inventories; (2) labor agreements with two major companies which reduced hedge buying; (3) end-user resistance to higher prices; and (4) reduced steel consumption by the auto industry. Given the slackening demand, third quarter prices are reportedly expected to be at first quarter levels, or \$10-\$15 per ton below second quarter prices. 3/

1/ American Metal Market, February 14, 1986.

2/ American Metal Market, January 31, 1986, February 14, 1986.

3/ American Metal Market, March 12, 1986, April 17, 1986, May 21, 1986.

Because imports meet 50 percent of West Coast steel needs, (double the U.S. average), pricing developments in flat-rolled sheet products tend to differ in that market. Producers in that region, concerned with increasing import vulnerability, did not follow the price move initiated in January. However, recent currency appreciation of the yen relative to the dollar is reportedly expected to result in rising import prices, which, in turn, could lead to domestic price increases in that region during the summer months. ^{1/}

With regard to international price comparisons, following is a tabulation which compares U.S. prices for sheet products with the domestic prices (denominated in U.S. dollars) of other major steel producing nations, as of April 1986.

"Spot" price comparisons, April 1986

(U.S. dollars per net ton)

<u>Market</u>	<u>Hot-rolled coil</u>	<u>Cold-rolled coil</u>	<u>Galvanized sheet</u>
Canada	310	400	486
EC	298	384	473
Japan			
Dealer	347	459	660
Big Buyer	425	506	593
United States	330	430	629

Source: Compiled from data contained in World Steel Dynamics: Steel Pricetrack 18, April 15, 1986.

Wire rod.—The wire rod market has been a highly competitive one during the 1980's, with prices generally following a downward trend. After declining \$20-\$40 per ton (or an estimated 7-13 percent) from July 1984

^{1/} American Metal Market, January 31, 1986, February 14, 1986, May 23, 1986.

through the end of 1985, transaction prices for carbon wire rod reportedly strengthened during the first and second quarters of 1986. 1/ According to the trade press, an industry-wide price hike of \$10-\$20 per ton on carbon and alloy wire rod (approximately 3-7 percent) announced for second quarter shipments was successful for several reasons, including strengthening demand, the effects of the depreciating dollar on steel import prices, and the impact of import limitations. While the Midwest market for wire rod was reported softer than the Eastern market (attributed to the effect of wire rod imports from Canada) a price hike of \$10 per ton held; the April 1 hike reportedly did not apply in the Western United States. 2/

Spurred by the continued strong demand and the weakening of the dollar against other developed country currencies, several major companies announced additional price hikes of \$10 per ton on carbon and alloy wire rod, effective July 1. If successful, this move will raise transaction prices of wire rod to \$300 - \$420 per ton, depending on grade and volume. Industry sources indicate, however, that this price level is still \$20 per ton below 1984 prices. 3/

Plate.—Prices in the steel plate market, particularly in the Western market, are reported to have been deteriorating since the first half of 1985, and by December were at 1979 levels. 4/ A move intended to increase transaction prices \$30-\$40 per ton was apparently not fully accepted in the market, as prices for carbon and high strength/low alloy plate in the East and

1/ American Metal Market, January 17, 1986, January 22, 1986, April 9, 1986.

2/ American Metal Market, January 17, 1986, January 22, 1986, April 9, 1986.

3/ American Metal Market, April 18, 1986, May 9, 1986, May 13, 1986.

4/ American Metal Market, January 21, 1986.

Midwest rose by \$15-\$20 per ton; efforts to raise alloy plate prices were reportedly unsuccessful due to increased imports of lower priced alloy plate. 1/

West Coast plate prices, after rising in January, are reported to have declined for second and third quarter sales. Falling import prices for third quarter shipments, heavy inventories, and declining energy and capital equipment spending are reported to have contributed to the sluggish market and deteriorating prices. 2/

The steel plate market reportedly remains relatively strong, however, in the Southeast (particularly in Florida) where the construction sector is attributed with maintaining demand and prices. In the Western Gulf Coast region, however, demand and prices have fallen, due to a decline in oil drilling. 3/

With regard to international price comparisons, following is a tabulation which compares U.S. "spot" prices for plate products with "spot" plate prices, denominated in dollars, in other nations, as of April 1986.

1/ American Metal Market, January 21, 1986.

2/ American Metal Market, January 29, 1986, May 23, 1986.

3/ American Metal Market, March 13, 1986.

"Spot" price comparisons, April 1986

(U.S. dollars per net ton)

<u>Market</u>	<u>Plate</u>
Canada.....	359
EC.....	324
Japan.....	
Dealer.....	327
Big Buyer.....	451
United States.....	320

Source: Compiled from data contained in World Steel Dynamics: Steel Pricetrack 18, April 15, 1986.

Bar products.—Bar product prices are reported to have increased gradually over the last six months. During the first quarter of 1986 producers announced increases in hot-rolled bar product prices of \$10-\$40 per ton. These increases were followed in the spring with additional price increases of about \$5-\$10 per ton. A \$10 per ton hike in the published price of reinforcing bar in April also held in the East Coast market; its success in the Midwest has not yet been determined. ^{1/} With regard to international price comparisons, following is a tabulation which compares U.S. rebar "spot" prices with domestic rebar "spot" prices, denominated in dollars, in other major producing nations, as of April 1986.

^{1/} American Metal Market, January 1, 1986, April 28, 1986.

"Spot" price comparisons, April 1986

(U.S. dollars per net ton)

<u>Market</u>	<u>Rebar</u>
Canada_____	260
EC_____	307
Japan_____	
Dealer_____	307
United States_____	267

Source: Compiled from data contained in World Steel Dynamics: Steel Pricetrack 18, April 15, 1986.

Oil country tubular goods.—The market for oil country tubular goods is reported to have become increasingly unstable in 1986, as demand for steel products in that industry declined due to the deterioration in oil prices. While some major producers attempted to boost transaction prices by reducing price discounts (which were as high as 40 percent in the fourth quarter of 1985), industry press reports indicate that in some cases, products were being sold at 75 percent off the list price. Price discounts in the market, however, are commonly reported at 25-50 percent. ^{1/}

Specialty steel.—Specialty steel products experienced price increases in the first half of 1986, primarily through the reduction of discounts given to distributors. Effective February 3, 1986, discounts on certain plate products were reduced by 3-5 percentage points, from 25-35 percent to 20-32 percent. Transaction prices for certain stainless sheet and strip products were also raised through a subsequent reduction in distributor discounts of approximately 3 percentage points. Finally, a \$60 per ton price

^{1/} American Metal Market, February 28, 1986.

increase on certain sheet, plate, and strip products was announced by most major producers, effective for May or June shipments. Some producers announced an additional 4 percent increase in transaction prices on certain stainless strip products. 1/

Japan.—While the recent appreciation of the yen versus the dollar has caused Japanese prices denominated in dollars to rise, home currency dealer prices have been declining gradually since January 1984. From December 1985 to April 1986, home currency dealer prices dropped by a reported 8.1 percent. 2/

Japanese Big Buyer prices, denominated in yen, have reportedly remained steady since 1982. 3/ However, changes in exchange rates and declining prices elsewhere have pushed Big Buyer prices above other market "spot" prices. Originally intended to give large buyers bargain prices in steel, Big Buyer prices are currently approximately 8 percent above quoted dealer prices for plate and cold rolled sheet, and 16 percent above dealer prices for hot rolled sheet. Recent information indicates, however, that Japanese auto manufacturers are negotiating a price cut for steel used in auto production. The proposed cut of about 2,000 yen per metric ton 4/ (approximately 2 percent) is in response to a request from auto-makers that major steel producers reduce prices to return profits earned from lower import prices of raw materials. 5/ It is expected that similar steel price cuts will

1/ American Metal Market, January 9, 1986, January 10, 1986, January 20, 1986, February 25, 1986, February 26, 1986, March 11, 1986.

2/ World Steel Dynamics: Steel Pricetrack 18, April 15, 1986.

3/ Ibid.

4/ 1,814 yen per short ton.

5/ Report from U.S. Embassy, Tokyo, June 1986.

spread to other major steel consuming industries. Big Buyer prices account for about 70 percent of domestic shipments by Japanese mills. 1/

The Japanese steel industry has faced difficult times since mid-1985. Production in Japan has started to decline, reflecting that economy's declining demand for steel, and the strengthened yen has resulted in reduced export earnings (in yen). Moreover, export prospects are reported not to be encouraging given the current import restraint program in the United States and increased competition from developing world producers for the Chinese market. 2/

Canada.—"Spot" prices in the Canadian market have reportedly been rising since September 1984, with the increase during the December 1985 to April 1986 period totaling 2.2 percent. Canadian prices, however, are still below steel "spot" prices in the United States; the prices are reported to be 6 to 7 percent below U.S. "spot" prices for hot-rolled and cold-rolled coil, and 23 percent below U.S. "spot" prices for galvanized sheet in April 1986. Transaction prices in Canada are reported to have kept relatively close to list prices in recent months, in part due to stronger user demand from the automotive, appliance, and construction sectors. 3/

European Community.—Data indicate that dollar denominated "spot" prices in the European Community, as measured by French/German border trade, have risen for all products since early 1985. Composite price data, however, indicate minor home currency price fluctuations over the last few years.

1/ World Steel Dynamics: Steel Pricetrack 18, April 15, 1986.

2/ World Steel Dynamics: Steel Pricetrack 17, December 9, 1985, and World Steel Dynamics, "Factors Creating Change More Powerful than Business Cycles," June 24-25, 1986.

3/ World Steel Dynamics: Steel Pricetrack 17, December 9, 1985, and Steel Pricetrack 18, April 15, 1986.

Since the fall of 1985, flat-rolled steel prices are reported to have fallen by approximately 5 percent. 1/ Two attempts to raise prices since that decline have failed, reportedly due to lower costs and a relaxation of production quotas. Prices for structural products (i.e., rebar and wide flange beams), however, have remained strong, increasing in both dollar denominated and home currency terms. 2/ Though prices for flat-rolled products have declined in recent months, many major EC producers are reportedly continuing to be profitable. The reasons are reportedly due in part to the fact that changes in the exchange rate coupled with a decline in the prices of dollar denominated raw materials have reduced the costs of production and shipping.

Actions to Adjust and Modernize, Other than Capital Expenditures

Of the 83 companies responding to the questionnaire, 38 firms provided information on actions that had been taken to adjust and modernize, other than capital expenditures and research and development expenditures. A tabulation showing the number of companies reporting various types of actions follows. 3/

<u>Type of action</u>	<u>Number of companies</u>
Organizational changes-----	14
Divestitures and closures-----	10
Expansions and acquisitions-----	6
Cost reduction programs-----	12
Labor-related practices-----	14
Changes in company practices-----	13
Training/seminars-----	6
Other-----	21

1/ World Steel Dynamics: Steel Pricetrack 18, April 15, 1986.

2/ Ibid.

3/ See app. F for a company by company analysis of the actions taken by the responding firms.

Slightly over one-third of the firms providing responses reported on organizational changes and on taking actions affecting labor. With respect to organizational changes, nearly one-half of the companies took measures which affected management personnel. Other types of organizational changes reported included wholesale reorganization of companies or departments, in part to reflect changing corporate goals.

In the labor area, the predominant action taken was the reduction of either or both salaried and hourly personnel, followed by renegotiating new labor contracts that reduced hourly wage rates. Additional company actions taken included revising work rules, cutting employee benefits plans, early retirement, and creating management/labor teams.

One-third of the responding companies reported taking actions affecting company practices and reducing costs. With regard to changes in company practices, several reported on changes in the steelmaking process (to produce better quality steel more efficiently). Additional company actions included adding new product categories while discontinuing the production of others, increasing customer service programs, and revising marketing strategies.

In the cost reduction area, the majority of respondents noted actions taken to reduce energy costs by negotiating lower rates through the use of interruptible service, switching utility companies, and switching to less expensive energy inputs. Additionally, several of the companies responded that they had begun contracting out for maintenance, transportation, or other services, which had previously been performed by company personnel.

Actions taken in other areas include training in computer process control techniques, installing computers, closure and/or sale of outdated or

inefficient facilities, and entering into joint-ventures and technical agreements with domestic and/or foreign companies.

Investment in Activities Other than Steel

Following is a company by company report on investments that were made by U.S. producers in activities other than steel that were considered part of each firm's efforts to adjust during July 1, 1985-June 30, 1986. 1/

* * * * *

(Pages 54 to 56 contain information entitled to confidential treatment and have not been published.)

1/ Based on information submitted in response to questionnaires of the U.S. International Trade Commission.

CASH FLOW, CASH FLOW COMMITMENTS, 1/ AND ADJUSTMENT OF MAJOR COMPANIESNet Cash Flow, Cash Flow Commitments, and Expenditures for the
Retraining of Workers

* * * * *

(Pages 57 to 70 contain information which is entitled to confidential treatment or material which has been classified by the United States Trade Representative, and have not been published.)

1/ Under the Trade and Tariff Act of 1984 (P.L. 98-573) cash flow commitments include commitments, "for purposes of reinvestment in, and modernization of that [i.e., the steel] industry through investment in modern plant and equipment, research and development, and other appropriate projects such as working capital for steel operations and programs for the retraining of workers."

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Actions Taken to Maintain International Competitiveness

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(Pages 71 to 78 contain information which is entitled to confidential treatment or material which has been classified by the United States Trade Representative, and have not been published.)

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Appendix A

**Copy of Letter to Chairwoman Paula Stern from Ambassador William E. Brock,
United States Trade Representative, Requesting an Investigation**

THE UNITED STATES TRADE REPRESENTATIVE
WASHINGTON
20506

February 85 ^{FF 2 12} 1985

The Honorable Paula Stern
Chairwoman
United States International
Trade Commission
701 "E" Street, N.W.
Washington, D.C. 20436

Dear Madam Chairwoman:

On September 18, the President responded to the steel industry's petition for import relief under Section 201 of the Trade Act of 1974. A copy of his decision is enclosed. It was the President's concern that U.S. steel policy should promote the continued development of a free market environment in steel trade while maintaining maximum opportunities for the domestic steel industry to recover and modernize. In order to achieve this goal the President has directed me to coordinate his steel policy decision through the implementation of a nine point comprehensive policy.

To effectuate this policy, I request, at the direction of the President and pursuant to Section 332(g) of the Tariff Act of 1930, that the Commission monitor competitive conditions in the steel industry and the industry's efforts to adjust and modernize and to prepare annual reports on those efforts during the five year period beginning October 1, 1984. Also, inasmuch as certain specific information on these efforts will be required for the administration of the enforcement authority for the national policy for the steel industry, contained in title VIII of the Trade and Tariff Act of 1984 (the Act), I request the Commission to include in its annual reports, in addition to the basic categories of information listed in the attachment to this letter, the best information it can compile for the preceding 12-month period ending September 30 of each year on the following matters.

(A) The extent to which the major companies of the steel industry have, or will have committed their net cash flow from steel product operations for purposes of reinvestment in, and modernization of, that industry through investment in modern plant and equipment, research and development, and other appropriate projects, such as working capital for steel operations and programs for the retraining of workers;

(B) Actions taken by the major companies to maintain their international competitiveness, including action to produce price-

competitive and quality-competitive products, to control costs of production, including employment costs, and to improve productivity; and

(C) Whether each of the major companies committed, or will have committed, not less than one percent of net cash flow to the retraining of workers.

If any major company did not commit at least one percent of its net cash flow to the retraining of workers, the Commission should report any unusual economic circumstances which contributed to the company's failure to do so.

For the purpose of this request the terms "steel industry", "major company", and "net cash flow" shall have the same meaning as that set forth in title VIII of the Act.

In addition to reporting on the progress on the steel industry as a whole, I request that the Commission prepare its report in such a manner that, to the extent possible, the progress of carbon steel producers in their efforts to adjust and modernize can be distinguished from that of producers of specialty steel.

Inasmuch as the President's determination called for in the Act will have to be made before the end of each annual period, the Commission is requested to begin submitting its annual reports on August 1, 1985, and on each successive August 1 through 1989.

Very truly yours,



WILLIAM E. BROCK

WEB:hcc

Enclosure

THE WHITE HOUSE
Office of the Press Secretary

For Immediate Release

MEMORANDUM FOR THE UNITED STATES TRADE REPRESENTATIVE

SUBJECT: Steel Import Relief Determination

Pursuant to Section 202(b)(1) of the Trade Act of 1974, (P.L. 93-618, 88 Stat. 1978), I have determined the actions I will take with respect to the report of the United States International Trade Commission (USITC) dated July 24, 1984 concerning carbon and alloy steel.

I have determined today under Section 203 of the Trade Act that import relief is not in the national economic interest for the following reasons:

1. In responding to this pressing import problem, we must do all we can to avoid protectionism, to keep our market open to free and fair competition, and to provide certainty of access for our trading partners. This Administration has repeatedly, and most recently at the London Economic Summit, committed itself to "resist continuing protectionist pressures, to reduce barriers to trade, and to make renewed efforts to liberalize and expand trade in manufactures, commodities and services."
2. It is not in the national economic interest to take actions which put at risk thousands of jobs in steel fabricating and other consuming industries or in the other sectors of the U.S. economy that might be affected by compensation or retaliation measures to which our trading partners would be entitled.
3. This Administration has already taken many steps to deal with the steel import problem. In 1982, a comprehensive arrangement restraining steel imports from the European Community was negotiated. This Administration has also conducted an unprecedented number of antidumping and countervailing duty investigations of steel imports, in most cases resulting in the imposition of duties or a negotiated settlement. In addition, the governments of Mexico and South Africa have unilaterally imposed voluntary restraint on exports, leading to the termination of unfair trade complaints.

However, I have decided to establish a government policy for the steel industry. I believe that this new policy is the best way to respond to the legitimate concerns of the domestic industry while maintaining access to our market for those who trade fairly.

I am directing you to coordinate and direct the implementation of this policy for the U.S. steel industry which includes the following elements:

more

1. The United States Trade Representative (USTR) will negotiate "surge control" arrangements or understandings and, where appropriate, suspension agreements with countries whose exports to the United States have increased significantly in recent years due to an unfair surge in imports -- unfair because of dumping subsidization, or diversion from other importing countries who have restricted access to their markets. The USTR will negotiate additional such arrangements and understandings, if necessary, to control new surges of imports that result from subsidizing, dumping or other unfair or restrictive trade practices during the next five years. If agreements cannot be reached to control new surges from countries that are guilty of unfair practices, the President will use his authority under the unfair trade laws including Section 301 of the Trade Act of 1974 to assure that these countries do not maintain unrestricted access to the United States market.
2. The United States Trade Representative will reaffirm existing measures with countries that have voluntarily restrained their exports to our market, and will take necessary steps to ensure the effectiveness of these measures. Specifically the Administration will support legislation in the Congress to make enforceable at our borders all voluntary agreements and "surge control" arrangements.
3. The United States Trade Representative will consult with our trading partners to seek the elimination of trade distortive and trade restraining practices in other markets to lead to the liberalization of steel trade around the world.
4. The Department of Commerce will continue to rigorously enforce our unfair trade laws. Further, the Department of Commerce and the United States Trade Representative will self-initiate unfair trade cases including anti-dumping, countervailing duty and Section 301 actions when appropriate.
5. The United States International Trade Commission will be asked to monitor the efforts of the steel industry to adjust and modernize, and to prepare an annual report for the President on those efforts.
6. The Secretary of Commerce will establish an interagency group to analyze all U.S. government domestic tax, regulatory and antitrust laws and policies which could hinder the ability of the steel industry to modernize.
7. The Secretary of Defense and the Federal Emergency Management Agency will analyze domestic steel plate rolling capacity in relationship to emergency needs, and to recommend to the President appropriate actions if deficiencies are found to exist.
8. The Secretary of Labor will work with state and local governments to develop a program to assist workers in communities adversely affected by steel imports.

9. The United States Trade Representative will closely monitor the trade elements of this program and the resultant import trends and report them to the President on a quarterly basis.

The Administration's hope is that this combination of actions, taken without protectionist intention or effect would enable one of the United States' most basic and vital industries to return to a level playing field, one in which steel is traded on the basis of market forces, not government intervention, and one in which the market would seek a return to a more normal level of steel imports, or approximately 18.5 percent, excluding semi-finished steel.

This determination is to be published in the Federal Register.

RONALD REAGAN

♦ ♦ ♦ ♦ ♦

Attachment

Annual data specified in section B below are requested to be reported to the maximum extent possible for each of the 21 product categories listed in section A below:

A. Product Categories

Sheet and strip

1. Hot rolled carbon and certain alloy 1/
2. Cold rolled carbon and certain alloy 1/
3. Galvanized carbon and certain alloy 1/
4. Other carbon and certain alloy 1/
5. Stainless

Plate

1. Carbon and certain alloy 1/
2. Stainless

Pipe and tube

1. Oil country tubular goods
2. Line pipe
3. Other carbon and alloy pipes and tubes
4. Stainless

Bars

1. Hot finished carbon bar and certain alloy 1/
2. Cold finished carbon bar and certain alloy 1/
3. Reinforcing carbon bar and certain alloy 1/

Structurals

1. Structural shapes (including fabricated structurals)

Rails and related railway products

1. Rails and related railway products

Wire rods

1. Carbon and certain alloy wire rod 1/

Wire and wire products

1. Carbon and certain alloy wire 1/
2. Stainless wire
3. Carbon and certain alloy 1/ wire products (including wire rope and strand)

1/ Certain alloy refers to alloy steel other than stainless and alloy tool steel.

Semifinished

1. Semifinished

B. Data Requested

Domestic Producers

Production
Shipments
Net sales
Net profits
Orders
Inventories
Prices
Employment
Man-hours

Capital expenditures:
For modern production
techniques or facilities
For older production
techniques or facilities
For pollution control or
occupational safety
and health
Other
Capacity and net change
in capacity
Research and development
expenditures
Other actions to adjust
and modernize
Investments in activities
other than steel

Importers

Total imports
Prices
Orders
Inventories

Appendix B

Notice of the Commission's Investigation

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C. 20436

(332-209)

Annual Surveys Concerning Competitive Conditions in the Steel Industry
and Industry Efforts to Adjust and Modernize

AGENCY: UNITED STATES INTERNATIONAL TRADE COMMISSION

ACTION: Institution of an investigation under section 332(g) of the Tariff Act of 1930 (19 U.S.C. 1332 (g)) concerning the competitive conditions in the steel industry and the industry's efforts to adjust and modernize.

EFFECTIVE DATE: March 8, 1985

FOR FURTHER INFORMATION CONTACT: Mr. Dennis Rapkins or Mr. Peter Avery, Minerals and Metals Division, United States International Trade Commission, 701 E Street NW., Washington, D.C. 20436 (telephone: 202-523-0438, 202-523-0342, respectively).

BACKGROUND AND SCOPE OF INVESTIGATION: The Commission instituted the investigation, No. 332-209, following receipt on February 12, 1985, of a request from the United States Trade Representative (USTR), at the direction of the President. In accordance with the request, the Commission will monitor competitive conditions in the steel industry and the industry's efforts to adjust and modernize, and prepare annual reports on those efforts during the 5 year period beginning October 1, 1984. In addition to collecting the information listed in the appendix, the Commission will compile the best information it can for the preceding 12-month period ending September 30 of each year on the following matters:

- (1) The extent to which the major companies of the steel industry have, or will have committed their net cash flow from steel product operations for purposes of reinvestment in, and modernization of, that industry through investment in modern plant and equipment, research and development, and other appropriate projects, such as working capital for steel operations and programs for the retraining of workers;
- (2) Actions taken by the major companies to maintain their international competitiveness, including action to produce price-competitive and quality-competitive products, to control costs of production, including employment costs, and to improve productivity; and
- (3) Whether each of the major companies committed, or will have committed, not less than one percent of net cash flow to the retraining of workers. If any major company did not commit at least one percent of its net cash flow to the retraining of workers, the Commission will report any unusual economic circumstances which contributed to the company's failure to do so.

For the purposes of this investigation, the term "steel industry" is defined as producers in the United States of steel products; "major company" is an enterprise whose raw steel production in the United States during 1983 exceeded 1,500,000 net tons; and "net cash flow" is annual net (after-tax) income plus depreciation, depletion allowances, amortization, and changes in reserves minus dividends and payments on short-term and long-term debts and liabilities.

In addition to reporting on the progress of the steel industry as a whole, reports will be prepared in such a manner that, to the extent possible, the progress of carbon steel producers in their efforts to adjust and modernize can be distinguished from that of producers of specialty steel.

The Commission will submit its initial annual report to the President and USTR by August 1, 1985. Subsequent reports will be submitted by August 1 of each successive year through 1989. A public version of the report will be available 2 weeks later.

WRITTEN SUBMISSIONS: Interested persons are invited to submit written statements concerning the investigation. Commercial or financial information which a submitting party desires the Commission to treat as confidential must be submitted on separate sheets of paper, each clearly marked "Confidential Business Information" at the top. All submissions requesting confidential treatment must conform with the requirements of section 201.6 of the Commission's Rules of Practice and Procedures (19 CFR 201.6). All written submissions, except for confidential business information, will be made available for inspection by interested persons. To be assured of consideration by the Commission, written statements should be received at the earliest possible date, but no later than July 1, 1985 and by July 1 of each successive year through 1989. All submissions should be addressed to the Secretary at the Commission's Office in Washington, D.C.

By order of the Commission.



Kenneth R. Mason
Secretary

Attachment

Issued: March 11, 1985

Annual data specified in section B below are requested to be reported to the maximum extent possible for each of the 21 product categories listed in section A below:

A. Product Categories

Sheet and strip

1. Hot rolled carbon and certain alloy 1/
2. Cold rolled carbon and certain alloy 1/
3. Galvanized carbon and certain alloy 1/
4. Other carbon and certain alloy 1/
5. Stainless

Plate

1. Carbon and certain alloy 1/
2. Stainless

Pipe and tube

1. Oil country tubular goods
2. Line pipe
3. Other carbon and alloy pipes and tubes
4. Stainless

Bars

1. Hot finished carbon bar and certain alloy 1/
2. Cold finished carbon bar and certain alloy 1/
3. Reinforcing carbon bar and certain alloy 1/

Structurals

1. Structural shapes (including fabricated structurals)

Rails and related railway products

1. Rails and related railway products

Wire rods

1. Carbon and certain alloy wire rod 1/

Wire and wire products

1. Carbon and certain alloy wire 1/
2. Stainless wire
3. Carbon and certain alloy 1/ wire products (including wire rope and strand)

Semifinished

1. Semifinished (carbon and certain alloy 1/; and stainless and tool steel)

1/ Certain alloy refers to alloy steel other than stainless and alloy tool steel.

B. Data Requested

Domestic Producers

Production
Shipments
Net sales
Net profits
Orders
Inventories
Prices
Employment
Man-hours

Capital expenditures:
For modern production
techniques or facilities
For older production
techniques or facilities
For pollution control or
occupational safety
and health
Other
Capacity and net change
in capacity
Research and development
expenditures
Other actions to adjust
and modernize
Investments in activities
other than steel

Importers

Total imports
Prices
Orders
Inventories

Appendix C

**Definition of Certain Terms, and Description of the Products Subject
to the Investigation**

DEFINITIONS

1. Steel.--An alloy of iron and carbon which is malleable as first cast. Steel may contain other elements, but iron must predominate, by weight, over each of the other elements.

2. Carbon steel.--Steel in which none of the elements listed below exceeds the quantity, by weight, respectively indicated:

1.65 percent of manganese, or
 0.25 percent of phosphorus, or
 0.35 percent of sulphur, or
 0.60 percent of silicon, or
 0.60 percent of copper, or
 0.30 percent of aluminum, or
 0.20 percent of chromium, or
 0.30 percent of cobalt, or
 0.35 percent of lead, or
 0.50 percent of nickel, or
 0.30 percent of tungsten, or
 0.10 percent of any other metallic element.

3. Alloy steel.--Steel which contains any of the elements listed in definition 5 (above) in excess of its specified quantity.

(i) Stainless steel.--Any alloy steel which contains by weight less than 1 percent of carbon and over 11.5 percent of chromium;

(ii) Tool steel.--Alloy steel which contains the following combinations of elements in the quantity, by weight, respectively indicated:

(A) not less than 1.0 percent carbon and over 11.0 percent chromium, or

(B) not less than 0.85 percent carbon and 1.0 percent to 1.8 percent inclusive manganese; or

(C) 0.9 percent to 1.2 percent inclusive chromium and 0.9 percent to 1.4 percent inclusive molybdenum; or

(D) not less than 0.5 percent carbon and not less than 3.5 percent molybdenum; or

(E) not less than 0.5 percent carbon and not less than 5.5 percent tungsten; or

(F) not less than 0.3 percent carbon and 1.25 percent to 11.0 percent inclusive chromium.

DEFINITIONS--Continued

4. Galvanized.--Steel which has been coated or plated with zinc.
5. Hot-rolled.--Steel which has been reduced to its final thickness by heating and rolling the product at elevated temperature (usually above 2,200° F).
6. Cold rolled.--Steel which has been reduced to its final thickness by rolling the product without heating it immediately prior to the rolling operation.
7. Continuous casting.--The method of producing semifinished products in which molten steel flows evenly into a caster where it is rapidly cooled, causing it to solidify directly into semifinished products such as slabs and billets.
8. Short ton.--Two thousand (2,000) pounds.

Semifinished products include

9. (A) Ingots.--Castings resulting from the solidification of molten steel and having a columnar form suitable for working by rolling or forging. Ingots are included in American Iron and Steel Institute (AISI) product group No. 1A.

(B) Blooms and billets.--Semifinished products generally of rectangular or circular cross section, having a length several times greater than the maximum cross-sectional dimension, and, if rectangular, a width less than 4 times the thickness. A bloom is at least 36 square inches but not less than 3 square inches in cross-sectional areas. Blooms and billets are included in AISI product group No. 1B.

(C) Slabs and sheet bars.--Semifinished products of rectangular cross section, having a width of at least 4 times the thickness. A slab is not less than 2 inches in thickness; a sheet bar is less than 2 inches in thickness. Slabs and sheet bars are included in AISI product group No. 1B.

For the purpose of this investigation, semifinished products are classified as follows:

(i) Carbon and certain alloy semifinished products, as provided for in items 606.6705, 606.6710, 606.6715, 606.6720, 606.6725, 606.6730, 606.6735, 606.6740, 606.6949, 606.6951, 606.6953, 606.6955, 606.6957, 606.6959, 606.6961, 606.6963, and 607.6620 of the Tariff Schedules of the United States Annotated (1986) TSUSA.

DEFINITIONS--Continued

(ii) Stainless and alloy tool steel semifinished products, as provided for in items 606.6901, 606.6902, 606.6904, 606.6905, 606.6906, 606.6909, 606.6912, 606.6915, 606.6918, 606.6921, 606.6923, and 607.7210 of the TSUSA.

10. Sheets and strip.--Flat rolled products whether or not corrugated or crimped, in coils or cut to length. Sheets are under 0.1875 inch in thickness and over 12 inches in length. Strip is under 0.1875 inch in thickness and, if cold rolled, over 0.50 inch but not over 12 inches in width, or, if not cold rolled, not over 12 inches in width. Sheets and strip are included in AISI product group Nos. 28, 29, 29A, 30, 31, 32, 33A, 33B, 34, 34B, 35, 36, and 37. For the purposes of this investigation, sheets and strip are classified as follows:

(i) Hot-rolled carbon and alloy steel sheets and strip; provided for in items 607.6710, 607.6720, 607.6730, 607.6740, 607.8100, 607.8342, 607.9205, 608.1920, 608.2120, and 608.2320 of the TSUSA.

(ii) Cold-rolled carbon and alloy steel sheets and strip; provided for in items 607.6200, 607.6400, 607.8350, 607.8355, 607.8360, 607.9210, 607.9315, 607.9320, 608.1940, 608.2145, 608.2150, 608.2340, 608.3810, 608.3820, 608.3900, 608.5510, 608.5520, 608.6710, and 608.6720 of the TSUSA.

(iii) Galvanized carbon and alloy steel sheets and strip; provided for in items 608.0730, 608.1310, 608.1320, and 608.1330 of the TSUSA.

(iv) All other carbon and alloy steel sheets and strip; provided for in items 607.9600, 607.9700, 607.9900, 608.0100, 608.1340, 608.1350, 608.1440, 609.1710, and 609.1790 of the TSUSA.

(v) Stainless steel sheets and strip; provided for in items 607.7610, 607.9010, 607.9020, 608.2600, 608.2900, 608.4300, and 608.5700 of the TSUSA.

11. Plates.--Flat rolled products whether or not corrugated or crimped, in coils or cut to length. Plates are 0.1875 inch or more in thickness and, if not cold rolled, over 8 inches in width. Plates are included in AISI product group No. 6. For the purposes of this investigation, plates are classified as follows:

(i) Carbon and certain alloy steel plate; as provided for in items 607.6610, 607.6625, 607.7806, 607.8320, 607.9100, 607.9400, 608.0710, 608.1100, 608.1420, 609.1400, and 609.1500 of the TSUSA.

(ii) Stainless steel plate; as provided for in items 607.7606 and 607.9005 of the TSUSA.

12. Pipes and tubes and blanks therefor.--Tubular products, including hollow bars and hollow billets but not including hollow drill steel, of any cross-sectional configuration, by whatever process made, whether seamless, brazed, or welded and whether with an open or lock seam or joint. For the purposes of this investigation, pipes and tubes and blanks therefor are classified as follows:

DEFINITIONS--Continued

(i) Oil country tubular goods, conforming to American Petroleum Institute (API) specifications, as provided for in items 610.3216, 610.3219, 610.3233, 610.3249, 610.3252, 610.3256, 610.3258, 610.3264, 610.3721, 610.3722, 610.3925, 610.3935, 610.4025, 610.4035, 610.4210, 610.4220, 610.4225, 610.4230, 610.4235, 610.4240, 610.4310, 610.4320, 610.4325, 610.4335, 610.4942, 610.4944, 610.4946, 610.4954, 610.4957, 610.4968, 610.4969, 610.4970, 610.5221, 610.5222, 610.5226, 610.5240, 610.5242, 610.5243, 610.5244 of the TSUSA. Oil country tubular goods are included in AISI product group No. 19.

(ii) Line pipe, conforming to API specifications; as provided for in items 610.3208, 610.3209, 610.3212, 610.3213, 610.3711, 610.3712, 610.3713, 610.4931, 610.4933, 610.4936, 610.5211, 610.5214, and 610.5216. Line pipe is included in AISI product group No. 20.

(iii) Other carbon and alloy (excluding stainless) pipes and tubes, as provided for in items 610.3000, 610.3100, 610.3205, 610.3221, 610.3227, 610.3231, 610.3234, 610.3241, 610.3242, 610.3243, 610.3254, 610.3262, 610.3500, 610.3600, 610.3704, 610.3728, 610.3732, 610.3751, 610.3945, 610.3955, 610.4045, 610.4055, 610.4245, 610.4255, 610.4345, 610.4355, 610.4500, 610.4600, 610.4800, 610.4920, 610.4925, 610.4928, 610.4948, 610.4951, 610.4953, 610.4955, 610.4956, 610.4966, 610.4967, 610.4976, 610.5160, 610.5204, 610.5206, 610.5209, 610.5229, 610.5234, and 610.5236 of the TSUSA. Other carbon and alloy steel pipes and tubes are included in AISI product group Nos. 18, 21A, 21B, and 22.

(iv) Stainless steel pipes and tubes, welded or seamless, provided for in items 610.3701, 610.3727, 610.3731, 610.3741, 610.3742, 610.5130, 610.5202, 610.5230, and 610.5231. Stainless steel pipes and tubes are included in AISI product group Nos. 21C and 21D.

13. Bars.--Products of solid cross section not conforming completely to the respective specifications set forth in the TSUS for blooms, billets, slabs, sheet bars, wire rods, plates, sheets, strip, wire, rails, joint bars, or tie plates, and which have cross sections in the shape of circles, segments of circles, ovals, triangles, rectangles, hexagons, or octagons. Also, for the purposes of this investigation, the term "bars" includes hollow drill steel, which is a hollow product in any cross section suitable for use in making mining drills or mining drill rods, with the largest internal cross-sectional dimension not greater than one-third of the largest external cross-sectional dimension. For the purposes of this investigation, bars are classified as follows:

(i) Hot finished carbon and certain alloy steel bars; as provided for in items 606.8310, 606.8330, 606.8350, 606.8600, 606.9700, 607.0500, 607.0700, and 607.0900 of the TSUSA, and included in AISI product group No. 14.

(ii) Cold finished carbon steel and certain alloy steel bars; as provided for in items 606.8805, 606.8815, and 606.9900 of the TSUSA, and included in AISI product group No. 16.

DEFINITIONS--Continued

(iii) Reinforcing carbon and certain alloy steel bars; which are hot-rolled steel bars, of solid cross section, having deformations of various patterns on their surfaces; as provided for in items 606.79 and 606.81 of the TSUS and included in AISI product group No. 15.

14. Structural shapes and units include the following articles:

(i) Angles, shapes, and sections. Nontubular products not conforming completely to the respective specifications set forth in the TSUS for blooms, billets, slabs, sheet bars, bars, wire rods, plates, sheets, strip, wire, rails, joint bars, or tie plates, hot rolled, forged, extruded, or drawn, or cold formed or cold finished, whether or not drilled, punched, or otherwise advanced, and if cold formed weighing over 0.29 pound per linear foot. Angles, shapes, and sections comprise:

(A) Light structural shapes (bar-size light shapes having a maximum cross-sectional dimension of less than 3 inches; as provided for in items 609.8050, 609.8070, 609.8090, 609.8235, and 609.8240 of the TSUSA and included in AISI product group No. 14A; and

(B) Heavy structural shapes having a maximum cross-sectional dimension of 3 inches or more; as provided for in items 609.8005, 609.8010, 609.8015, 609.8020, 609.8025, 609.8035, 609.8041, 609.8045, 609.8225, and 609.8230 of the TSUSA and included in AISI product group Nos. 4 and 5(pt.); and

(ii) Sheet piling.--Rolled straight web, deep-arch, arch-web, and Z-sections having continuous interlocking joints on each lengthwise edge; as provided for in items 609.96 and 609.98 of the TSUS. Sheet piling is included in AISI product group No. 5 (pt); and

(iii) Fabricated structural units, which include columns, pillars, posts, beams, girders, and similar structural units; as provided for in items 609.84, 609.86, 652.94, 652.96 and 653.00 of the TSUS. These columns, pillars, etc., are included in AISI-product group No. 38.

15. Rails and related railway products as defined by the following:

(i) Rails are hot-rolled steel products, whether punched or not punched, weighing not less than 8 pounds per yard, with cross-sectional shapes intended for carrying wheel loads in railroad, railway, and crane runway applications; as provided for in items 610.2010, 610.2025, 610.2030, and 610.2100 of the TSUSA. Rails are included in AISI product group Nos. 7 and 8.

(ii) Joint bars are hot-rolled steel products, usually punched or slotted, designed to connect the ends of adjacent rails in track; tie plates are hot-rolled steel products which are punched to provide holes for spikes and have one or two shoulder sections as rail guides and are used to support rails in track, to maintain track gauge, and protect the ties; all the foregoing, as provided for in items 610.25 and 610.26 of the TSUS. Joint bars and tie plates are included in AISI product group Nos. 9 and 10.

DEFINITIONS--Continued

(iii) Railway track spikes, of one piece construction, used to secure tie plates or ties; as provided for in item 646.3020 of the TSUSA. Railway track spikes are included in AISI product group No. 11.

(iv) Railroad and railway (RR) axles and wheels, parts thereof, and axle bars; as provided for in items 690.25 and 690.30 of the TSUS. These articles are included in AISI product group Nos. 12 and 13.

16. Carbon and certain alloy wire rods.--Coiled, semifinished, hot-rolled products of solid cross section, approximately round in cross section, not under 0.20 inch nor over 0.74 inch in diameter; as provided for in items 607.14, 607.17, 607.22, 607.23, 607.41, and 607.59 of the TSUS. Wire rods are included in AISI product group No. 3.

17. Wire and wire products are classified as follows:

(i) Carbon and certain alloy wire; a finished, drawn, nontubular product, of any cross-sectional configuration, in coils, and not over 0.703 inch in maximum cross-sectional dimension; the term includes a product of solid rectangular cross section, in coils, with a cold-rolled finish, and not over 0.25 inch thick and not over 0.50 inch wide. Wire is provided for in items 609.20, 609.21, 609.22, 609.25, 609.28, 609.35, 609.36, 609.37, 609.40, 609.41, 609.43, 609.70, 609.72, 609.75, and 609.76 of the TSUS, and item 609.3040, 609.3340, 609.4530, and 609.4560 of the TSUSA. Wire is included in AISI product group Nos. 23 and 27(pt.).

(ii) Stainless steel wire; as provided for in items 609.3020, 609.3320, 609.4502, 609.4504, 609.4510, 609.4540, 609.4542, and 609.4544 of the TSUSA. Stainless steel wire is included in AISI product group No. 23.

(iii) Carbon and certain alloy wire products as defined by the following:

(A) Barbed wire is a wire, or strand of twisted wires, armed with barbs or sharp points; as provided for in item 642.02 of the TSUS. Barbed wire is included in AISI product group No. 25(pt).

(B) Twisted barbless wire is a wire strand of loosely twisted double wire, suitable for fencing purposes, not fitted with fittings, not made up into articles, and not covered with nonmetallic material; as provided for in item 642.1105 of the TSUSA. Twisted barbless wire is included in AISI product group No. 25(pt).

(C) Wire strand is two or more wires which together constitute one of the parts which are twisted together to form rope, cord, or cordage, not fitted with fittings, not made up into articles, not of brass plated wire, not covered with nonmetallic material, and not including twisted barbless wire; as provided for in items 642.1120, 642.1142, 642.1144, and 642.1146 of the TSUSA. Wire strand is included in AISI product group No. 23(pt).

DEFINITIONS--Continued

(D) Wire ropes, cables, and cordage are products made by the twisting of a number of wire strands and are not covered with nonmetallic material, not fitted with fittings, not made up into articles, and, if valued 13 cents or more per pound, not of brass plated wire; as provided for in items 642.12 and 642.16 of the TSUS. Wire ropes, cables, and cordage are included in AISI product group No. 23(pt).

(E) Wire fencing is a galvanized product wholly of round wire measuring not over 0.20 inch and not under 0.075 inch in diameter, whether or not such wire is covered with plastics; as provided for in item 642.35 of the TSUS. Wire fencing is included in AISI product group Nos. 23(pt) and 26.

(F) Brads, nails, spikes, staples, and tacks are fasteners, of one piece construction, made of round wire, and not including thumb tacks, staples in strip form, corrugated fasteners, glaziers' points, hook nails, ring nails, or fasteners suitable for use in power-actuated hand tools; as provided for in items 646.25 and 646.26 of the TSUS. Brads, nails, spikes, staples, and tacks are included in AISI product group No. 24.

(G) Other wire products comprises: wire bale ties, with or without buckles or fastenings and whether or not coated with paint or other substance; as provided for in items 642.90 and 642.91 of the TSUS and included in AISI product group No. 27(pt); and milliners' wire and other wire covered with textile or other material not wholly of metal; as provided for in items 642.96 and 642.97 of the TSUS and included AISI product group No. 23.

Appendix D

Statistical Tables, July 1, 1985-June 30, 1986

Table D-1.--Certain carbon and alloy steel: U.S. producers' capacity, changes in capacity, production, and capacity utilization, July 1, 1985 -- June 30, 1986

Item	: Changes in :		: Capacity	
	: Capacity	: capacity 1/	: Production	: Utilization
	-----Short tons-----		-----Percent-----	
Carbon and certain alloy steel: 2/	:	:	:	:
Cokemaking facilities.....	31,353,400	***	:22,767,801	73
Ironmaking facilities.....	72,813,500	***	:47,879,208	66
Steelmaking facilities: 3/	:	:	:	:
Electric furnace.....	39,668,773	4/	:27,042,481	68
Basic oxygen furnace.....	70,410,628	4/	:49,864,957	71
Other furnaces.....	12,460,700	4/	: 6,268,505	50
Total.....	122,540,101	***	:83,175,943	68
Continuous casting.....	50,456,545	4/	:38,788,305	77
Products:	:	:	:	:
Plates.....	8,488,864	***	: 3,299,877	39
Sheets and strip:	:	:	:	:
Hot rolled.....	57,665,784	***	:38,446,653	67
Cold rolled.....	31,567,304	***	:23,318,439	74
Galvanized.....	7,966,536	***	: 6,365,103	80
Other.....	8,628,760	***	: 6,014,905	70
Bars:	:	:	:	:
Hot finished.....	12,191,852	***	: 7,316,713	60
Cold finished.....	***	***	: ***	***
Reinforcing.....	5,772,044	***	: 4,391,925	76
Wire rod.....	5,432,519	***	: 3,912,335	72
Wire.....	740,940	***	: 370,293	50
Wire products.....	756,306	***	: 460,605	61
Structural shapes and units.....	6,853,102	***	: 4,550,827	66
Rails and related products.....	1,915,301	***	: 779,564	41
Pipes and tubes:	:	:	:	:
Oil country tubular goods.....	2,706,717	***	: 840,493	31
Line pipe.....	2,169,271	***	: 639,980	30
Other.....	2,148,474	***	: 978,404	46
Certain stainless and	:	:	:	:
and alloy tool steel:	:	:	:	:
Steelmaking facilities: 3/	:	:	:	:
Electric furnace.....	***	4/	: ***	***
Basic oxygen furnace.....	***	4/	: ***	***
Other furnaces.....	***	4/	: ***	***
Total.....	2,227,014	***	: 1,447,935	65
Continuous casting.....	1,098,595	4/	: 945,660	86
Stainless steel products:	:	:	:	:
Plates.....	257,300	***	: 167,100	65
Sheets and strip.....	1,067,505	***	: 746,716	70
Wire.....	35,950	***	: 28,342	79
Pipes and tubes.....	37,700	***	: 19,275	51

1/ Reported changes are likely to differ from changes in capacity calculated by company annual averages, due partly to the fact that reported capacity "averages in" the effect of closures or additions over the reporting period.

2/ Certain alloy refers to alloy steel other than stainless and alloy tool steel.

3/ Including semifinished steel.

4/ Change in capacity not calculated.

Table D-2.--Certain carbon and alloy steel: U.S. producers' shipments, unfilled orders, and inventories, and U.S. importers' imports, unfilled orders, and inventories, July 1, 1985 -- June 30, 1986

Product	U.S. Producers					U.S. Importers				
	Shipments		Unfilled orders 1/	Inven- tories 1/	Ratio of inventories to unfilled orders	Imports		Unfilled orders 1/	Inven- tories 1/	Ratio of inventories to unfilled orders
	Quantity	Value				Quantity	Value			
	(short tons)	(1,000 dollars)	Short tons			(short tons)	(1,000 dollars)	Short tons		
Carbon and certain alloy steel: 2/										
Semifinished.....	1,356,734	399,116	236,199	3/	-	1,085,607	331,454	220,759	75,621	0.34
Plates.....	3,305,985	1,460,518	301,327	176,541	0.59	823,914	284,016	346,925	33,324	0.10
Sheets and strip:										
Hot rolled.....	13,467,024	4,223,870	1,258,893	1,496,334	1.19	1,542,830	497,219	297,051	53,641	0.18
Cold rolled.....	11,137,481	4,940,806	1,569,954	2,067,920	1.32	1,885,890	919,815	360,632	36,080	0.10
Galvanized.....	6,374,866	3,379,715	1,160,075	968,584	0.83	1,513,277	885,391	281,326	34,890	0.12
Other.....	6,609,255	3,929,052	810,912	1,026,464	1.27	284,847	173,804	57,593	2,527	0.04
Subtotal, sheets and strip....	37,588,626	16,473,443	4,799,834	5,559,302	1.16	5,226,844	2,476,229	996,602	127,138	0.13
Bars:										
Hot finished.....	6,760,880	2,714,180	749,137	826,065	1.01	157,276	90,173	36,235	***	***
Cold finished.....			68,072			86,865	53,215	23,476	7,298	0.31
Reinforcing.....	4,480,028	1,350,680	430,149	446,491	1.04	100,974	27,939	6,167	***	***
Subtotal, bars.....	11,240,908	4,064,860	1,247,358	1,272,556	1.02	345,115	171,327	65,878	20,446	0.31
Wire rod.....	3,203,713	963,926	434,999	143,963	0.33	540,975	200,127	83,064	***	***
Wire.....	330,668	183,497	33,214	30,798	0.93	155,939	121,040	30,189	6,390	0.21
Wire products.....	438,279	268,412	35,996	40,114	1.11	188,307	167,741	29,656	11,901	0.40
Structural shapes and units.....	4,531,740	1,561,008	389,900	507,715	1.30	2,343,827	880,041	484,328	46,013	0.10
Rails and related products.....	750,142	342,086	104,860	49,045	0.47	305,373	138,446	10,056	2,998	0.30
Pipes and tubes:										
Oil country tubular goods.....	862,523	623,952	9,366	220,925	23.59	560,493	381,847	13,264	235,049	17.72
Line pipe.....	678,478	345,428	44,414	81,089	1.83	374,888	181,035	66,997	53,039	0.79
Other.....	883,488	697,906	76,910	113,071	1.47	573,515	303,866	112,034	66,876	0.60
Subtotal, pipes and tubes....	2,424,489	1,667,286	130,690	415,085	3.18	1,508,896	866,748	192,295	354,964	1.85
Total, carbon and certain alloy steel.....	65,171,284	27,384,152	7,714,377	8,195,119	1.06	12,524,797	5,637,169	2,459,752	683,402	0.28
Certain stainless and alloy tool steel:										
Semifinished.....	88,349	191,625	9,504	3/	-	4,218	6,535	***	***	***
Stainless steel:										
Plates.....	166,470	281,296	12,826	24,112	1.88	31,357	28,848	8,277	2,285	0.28
Sheets and strip.....	730,057	1,295,285	127,729	168,703	1.32	163,873	282,021	16,097	4,750	0.30
Wire.....	29,086	94,596	2,196	40,114	18.27	5,549	17,908	***	***	***
Pipes and tubes.....	19,661	90,115	2,589	8,961	3.46	20,096	57,416	3,312	3,727	1.13
Total, certain stainless and alloy tool steel.....	1,033,623	1,952,917	154,844	241,890	1.56	225,093	392,728	30,065	11,753	0.39
Grand total.....	66,204,907	29,337,069	7,869,221	8,437,009	1.07	12,749,890	6,029,897	2,489,817	695,155	0.28

1/ As of June 30, 1986.

2/ Certain alloy refers to alloy steel other than stainless and alloy tool steel.

3/ Inventories of semifinished steel intended for sale are estimated by the ITC staff to be negligible.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission, except as noted.

Table D-3.—Certain carbon and alloy steel: U.S. imports, by product,
June 1984–May 1985 and June 1985–May 1986

Item	(In tons)	
	Quantity June 1984– May 1985	June 1985– May 1986
Carbon and certain alloy steel products: 1/...		
Semifinished 2/.....	1,668,223	1,816,191
Plates.....	2,184,608	1,549,783
Sheets and strip:		
Hot rolled.....	2,618,281	2,226,887
Cold rolled.....	3,752,841	3,012,696
Galvanized.....	2,683,568	2,352,806
Other.....	734,537	687,548
Subtotal, sheets and strip.....	9,789,227	8,279,937
Bars:		
Hot finished.....	714,691	550,865
Cold finished.....	336,602	236,747
Reinforcing.....	423,139	409,912
Subtotal, bars.....	1,474,432	1,197,524
Wire rod.....	1,514,956	813,601
Wire.....	648,958	580,344
Wire products.....	707,691	646,600
Structural shapes and units.....	2,542,995	2,447,664
Rails and related railway products.....	388,816	344,443
Pipes and tubes:		
Oil country tubular goods.....	3,259,050	1,294,432
Line pipe.....	1,034,175	1,072,356
Other.....	1,061,601	1,546,748
Subtotal, pipes and tubes.....	5,354,826	3,913,536
Total, carbon and certain alloy steel....	26,274,732	21,589,623
Certain stainless and alloy tool steel:		
Semifinished 2/.....	12,790	22,960
Stainless steel:		
Plates.....	9,145	18,273
Sheets and strip.....	123,963	177,845
Wire.....	25,068	18,900
Pipes and tubes.....	29,010	36,652
Total, certain stainless and alloy tool steel.....	199,976	274,630
Grand total.....	26,474,708	21,864,253

1/ Certain alloy steel refers to alloy steel other than stainless and alloy tool steel.

2/ Imports of semifinished tool steel were not specifically provided for in the TSUSA prior to April 1985. Imports prior to April are recorded under the carbon and certain alloy steel category.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table D-4.--Average number of production and related workers employed in U.S. establishments producing certain carbon and alloy steel and hours worked by, wages paid to, and productivity of such employees, July 1, 1985 -- June 30, 1986

Item	Average number employed	Man-hours	Productivity (man-hours per ton)	Wages (1,000 dollars)	Unit hourly labor costs
Carbon and certain alloy steel: 1/					
Cokemaking facilities.....	10,977	23,284	1.02	369,133	\$15.85
Ironmaking facilities.....	8,961	18,707	0.39	297,404	15.90
Steelmaking facilities 2/.....	34,990	73,168	0.88	1,139,408	15.57
Products:					
Plates.....	7,061	14,680	4.45	231,749	15.79
Sheets and strip:					
Hot rolled.....	23,697	48,895	1.27	781,601	15.99
Cold rolled.....	19,705	42,122	1.81	666,122	15.81
Galvanized.....	6,250	13,321	2.09	215,594	16.18
Other.....	10,784	23,146	3.85	372,529	16.09
Subtotal, sheets and strip.....	60,436	127,484	3/	2,035,846	15.97
Bars:					
Hot finished.....	{14,548	{28,055	***	{426,833	{15.21
Cold finished.....			***		
Reinforcing.....	3,161	6,450	1.47	84,424	13.09
Subtotal, bars.....	17,709	34,505	3/	511,257	14.82
Wire rod.....	2,444	5,322	1.36	84,839	15.94
Wire.....	910	1,727	4.66	24,683	14.29
Wire products.....	1,462	2,801	6.08	39,338	14.04
Structural shapes and units.....	6,157	13,556	2.98	203,297	15.00
Rails and related products.....	952	1,820	2.33	24,876	13.67
Pipes and tubes:					
Oil country tubular goods.....	3,122	6,881	8.19	97,919	14.23
Line pipe.....	2,415	5,297	8.28	77,878	14.70
Other.....	4,795	9,759	9.97	137,433	14.08
Subtotal, pipes and tubes.....	10,332	21,937	3/	313,230	14.28
Total, carbon and certain alloy steel...	162,391	338,991	3/	5,275,060	15.56
Certain stainless and alloy tool steel:					
Steelmaking facilities 2/.....	5,823	9,995	6.90	157,221	15.73
Stainless steel products:					
Plates.....	1,100	2,268	13.57	35,058	15.46
Sheets and strip.....	4,670	10,173	13.62	155,479	15.28
Wire.....	700	1,425	50.28	20,019	14.05
Pipes and tubes.....	458	848	43.99	10,556	12.45
Total, stainless and alloy tool steel....	12,751	24,709	3/	378,333	15.31
Grand total.....	175,142	363,700	3/	5,653,393	15.54

1/ Certain alloy refers to alloy steel other than stainless and alloy tool steel.

2/ Including semifinished steel.

3/ Not applicable.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table D-5.--Certain carbon and alloy steel: U.S. producers' capital expenditures, by types of expenditures, and research and development expenditures, July 1, 1985 -- June 30, 1986

(In thousands of dollars)

Capital expenditures										
Item	For plant and equipment								Research and development expenditures	
	Land and improvement	For existing facilities				Total	For pollution control or occupational safety and health	Other		Total 1/
		For new facilities	Placed in service during: Jan 1, 1981- June 30, 1985	Placed in service prior to Jan 1, 1981						
Carbon and certain alloy steel: 2/										
Coke-making facilities.....	-	-	-	-	-	-	-	77,456	3,734	
Iron-making facilities.....	-	-	-	-	-	-	-	141,862	3,097	
Steelmaking facilities 3/.....	***	***	***	***	***	***	***	790,689	30,505	
Products:										
Plates.....	***	***	***	***	***	***	***	***	4,417	
Sheets and strip:										
Hot rolled.....	***	***	***	***	***	***	***	121,292	4,355	
Cold rolled.....	***	***	***	***	***	***	***	83,066	8,765	
Galvanized.....	***	***	***	***	***	***	***	174,320	13,477	
Other.....	***	***	***	***	***	***	***	117,744	11,923	
Subtotal, sheets and strip:	***	***	***	***	***	***	***	496,422	38,520	
Bars:										
Hot finished.....	***	***	***	***	***	***	***	{70,086	{2907	
Cold finished.....	***	***	***	***	***	***	***	***	***	
Reinforcing.....	***	***	***	***	***	***	***	51,265	570	
Subtotal, bars.....	***	***	***	***	***	***	***	121,351	3,477	
Wire rod.....	***	***	***	***	***	***	***	12,960	554	
Wire.....	***	***	***	***	***	***	***	3,587	270	
Wire products.....	***	***	***	***	***	***	***	2,313	272	
Structural shapes and units....	***	***	***	***	***	***	***	57,564	***	
Rails and related products.....	***	***	***	***	***	***	***	***	***	
Pipes and tubes:										
Oil country tubular goods....	***	***	***	***	***	***	***	12,478	3,408	
Line pipe.....	***	***	***	***	***	***	***	3,042	436	
Other.....	***	***	***	***	***	***	***	40,589	6,001	
Subtotal, pipes and tubes..	***	***	***	***	***	***	***	56,109	9,845	
Total, carbon and certain alloy steel.....	12,399	902,217	59,786	520,484	1,482,487	65,651	19,191	1,821,658	96,411	
Certain stainless and alloy tool steel:										
Steelmaking facilities 3/.....	***	***	***	***	***	***	***	27,985	***	
Stainless steel products:										
Plates.....	***	***	***	***	***	***	***	***	***	
Sheets and strip.....	***	***	***	***	***	***	***	25,220	***	
Wire.....	***	***	***	***	***	***	***	***	***	
Pipes and tubes.....	***	***	***	***	***	***	***	2,823	***	
Subtotal, certain stainless and alloy tool steel.....	93	44,216	9,137	23,162	76,515	2,380	311	80,407	17,128	
Grand total.....	12,492	946,433	68,923	543,646	1,559,002	68,031	19,502	1,902,065	113,539	

1/ Including nonitemized expenditures.

2/ Certain alloy refers to alloy steel other than stainless and alloy tool steel.

3/ Including semifinished steel.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table B-6.—Certain carbon and alloy steel: Income-and-loss data from U.S. operations, by product,
July 1, 1985 -- June 30, 1986

(In thousands of dollars)

Item	Total net sales 1/	Net profit or (loss) before taxes 2/	Net profit or (loss) as a percentage of sales
Carbon and certain alloy steel: 3/ :	:	:	:
Semifinished.....	426,757 :	(116,090):	(27.2)
Plates.....	1,471,992 :	(142,380):	(9.7)
Sheets and strip:	:	:	:
Hot rolled.....	4,530,747 :	(552,728):	(12.2)
Cold rolled.....	5,185,155 :	(91,644):	(1.8)
Galvanized.....	3,375,164 :	201,253 :	6.0
Other.....	3,657,661 :	176,909 :	4.8
Subtotal, sheets and strip....	16,748,727 :	(266,210):	(1.6)
Bars:	:	:	:
Hot finished.....	{2,377,716}	{(270,561):}	{(11.4)}
Cold finished.....	:	:	:
Reinforcing.....	1,193,523 :	42,336 :	3.5
Subtotal, bars.....	3,571,239 :	(228,225):	(6.4)
Wire rod.....	974,312 :	(8,697):	(0.9)
Wire.....	185,835 :	(4,214):	(2.3)
Wire products.....	273,924 :	3,252 :	1.2
Structural shapes and units.....	1,576,190 :	(43,942):	(2.8)
Rails and related products.....	334,834 :	(13,805):	(4.1)
Pipes and tubes:	:	:	:
Oil country tubular goods.....	621,473 :	(109,290):	(17.6)
Line pipe.....	345,417 :	(83,820):	(24.3)
Other.....	695,416 :	(99,692):	(14.3)
Subtotal, pipes and tube.....	1,662,306 :	(292,802):	(17.6)
Total, carbon and certain alloy steel.....	27,226,116 :	(1,113,113):	(4.1)
Certain stainless and alloy tool steel:	:	:	:
Semifinished.....	160,115 :	(5,352):	(3.3)
Stainless steel:	:	:	:
Plates.....	225,839 :	(38,221):	(16.9)
Sheets and strip.....	846,418 :	49,712 :	5.9
Wire.....	95,996 :	3,898 :	4.1
Pipes and tubes.....	79,720 :	(1,645):	(2.1)
Subtotal, certain stainless and alloy tool steel.....	1,408,088 :	8,392 :	0.6
Grand total.....	28,634,204 :	(1,104,721):	(3.9)

1/ Includes intracompany and intercompany transfers, less discounts, returns, and allowances.

2/ Net profit is defined as the total net sales, less the cost of goods sold, general, selling and administrative expenses, and other expenses (such as net interest expense (or income)).

3/ Certain alloy refers to alloy steel other than stainless and alloy tool steel.

Source: Compiled from data estimated in response to questionnaires of the
U.S. International Trade Commission.

Table D-7.--Certain carbon and alloy steel: Financial experience of U.S. producers,
July 1, 1985 - June 30, 1986

(In thousands of dollars)			
Item	All carbon and certain alloy 1/ products subject to the investigation 2/	All stainless and alloy tool steel products subject to the investigation 2/	Total 2/
NET SALES:			
Excluding intracompany and intercompany transfers.....	27,131,541	1,920,147	29,051,688
Intracompany and intercompany transfers.....	2,918,177	46,211	2,964,388
Total net sales.....	30,049,718	1,966,358	32,016,076
COST OF GOODS SOLD (including intracompany and intercompany transfers):			
Raw Materials.....	9,861,906	427,733	10,289,639
Direct labor.....	4,539,966	195,795	4,735,761
Other factory costs, including depreciation and amortization..	13,091,599	461,671	13,553,270
Total cost of goods sold 3/.....	29,400,673	1,737,713	31,138,386
GROSS PROFIT OR (LOSS).....	649,045	228,645	877,690
GENERAL, SELLING, AND ADMINI- STRATIVE EXPENSES.....	1,322,770	111,004	1,433,774
NET OPERATING PROFIT OR (LOSS).....	(673,725)	117,641	(556,084)
OTHER INCOME OR (EXPENSE):			
Net interest income or expense.....	(728,187)	(32,567)	(760,754)
All other income or (expense)....	148,738	(50,619)	98,119
Total other income or expense 4/.....	(579,449)	(83,186)	(662,635)
NET PROFIT OR (LOSS) BEFORE TAXES..	(1,253,174)	34,455	(1,218,719)
Depreciation and amortization.....	1,393,219	41,704	1,434,923

1/ Certain alloy refers to alloy steel other than stainless and alloy tool steel.

2/ Certain respondents included financial information on related products.

3/ Including nonitemized costs.

4/ Including nonitemized expenses.

Source: Compiled from data submitted in response to questionnaires of the
U.S. International Trade Commission.

Table D-8.--Certain carbon and alloy steel: Weighted average net prices for the three largest sales by product, by specified period, July 1985 -- June 1986

		(Per ton)							
		Weighted average net price							
Product 2/		U.S. producers				U.S. importers			
		1985		1986		1985		1986	
		July-September	October-December	January-March	April-June	July-September	October-December	January-March	April-June
Carbon and certain alloy steel: 3/									
Semifinished.....		\$232.44	\$229.17	\$237.57	\$207.45	\$211.88	\$216.22	\$207.97	***
Plates.....		347.31	363.33	324.60	340.77	330.43	329.76	322.24	342.52
Sheets and strip:									
Hot rolled.....		313.58	273.83	293.06	295.10	329.67	314.99	318.86	335.20
Cold rolled.....		417.42	392.42	388.64	412.25	410.95	399.12	395.92	406.73
Galvanized.....		528.70	503.85	514.79	538.50	556.30	526.59	543.55	561.80
Other.....		615.77	664.65	654.90	623.48	554.64	693.77	730.33	595.08
Bars:									
Hot finished.....		305.02	301.43	304.07	305.65	278.25	317.88	291.55	304.16
Cold finished.....		***	***	***	***	544.99	647.79	548.17	642.00
Reinforcing.....		284.76	285.48	285.01	285.17	248.33	297.65	283.18	275.28
Wire rod.....		279.06	270.98	267.61	276.31	290.52	273.32	271.09	291.50
Wire.....		***	***	***	463.11	440.98	443.06	449.19	456.76
Wire products.....		***	***	***	***	***	4/	4/	4/
Structural shapes and units.....		325.48	307.47	307.42	345.50	338.32	335.78	340.50	343.37
Rails and related products.....		368.36	416.33	399.44	417.31	433.56	444.94	439.24	440.32
Pipes and tubes:									
Oil country tubular goods.....		***	***	***	***	516.53	469.88	***	***
Line pipe.....		452.86	441.94	439.00	463.34	595.06	529.86	439.23	427.51
Other.....		4/	4/	4/	4/	561.57	480.42	580.90	560.69
Certain stainless and alloy tool steel:									
Semifinished.....		1464.29	1394.74	1444.44	1390.24	4/	4/	4/	4/
Stainless steel:									
Plates.....		2364.02	2179.46	2172.79	2246.50	2370.37	***	2212.12	1915.89
Sheets and strip.....		1614.57	1641.72	1587.86	1607.14	1695.32	1742.15	1616.78	1629.95
Wire.....		4499.99	3363.63	3736.84	3571.42	4/	4/	4/	4/
Pipes and tubes.....		***	***	***	***	1072.08	840.58	2463.33	3076.09

1/ Prices are net of all discounts and allowances (including freight allowances) and excluding U.S. inland freight. Producers' prices are f.o.b. mill; importers' prices are f.o.b. warehouse, or, if shipped directly to customs, c.i.f., ex-dock, port of entry, duty paid.

Prices represent the total industry value of reported sales divided by the total quantity sold, based on the 3 largest sales of each firm.

2/ See Appendix E for description of products.

3/ Certain alloy refers to alloy steel other than stainless and alloy tool steel.

4/ No data reported.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Appendix E

Specifications of the Products Referenced in Pricing Section

The products identified below are those used by The Commission to collect pricing information in its questionnaires.

Semifinished

Product 1.--Carbon steel slabs for drawing applications, AISI 1008 rimmed steel or AISI 1008 aluminum killed, fine grain, 6 inches-10 inches thick, 30 inches-80 inches wide, 20 feet to 40 feet long.

Product 2.--Stainless steel billets, Grade 304, round cornered square, 8 inches by 8 inches.

Sheets and strip

Product 3.--Hot-rolled carbon steel bands, in coils, mill edge, commercial quality, 0.25 percent carbon maximum, not pickled, 0.1210 inches through 0.1875 inch in thickness, over 36 inches through 72 inches in width.

Product 4.--Cold-rolled carbon steel sheets, in coils, commercial quality, class 1, 0.0280 inch through 0.0630 inch in thickness, 45 inches through 60 inches in width.

Product 5.--Galvanized carbon steel sheet, in coils, commercial or lock forming quality, G-40 coating, regular or minimum spangle, 0.028 inch through 0.035 inch in thickness, 24 inches through 72 inches in width.

Product 6.--Electrolytic tin plate, S.R. 80-lb., .25 coating.

Product 7.--Stainless steel cold-rolled sheets, AISI grade 304, 2B finish, 16 gauge in thickness, 36" (914 mm) exact through 48" (1,218 mm) exact in width, and coiled.

Plate

Product 8.--Hot-rolled carbon steel plate, in cut lengths, A-36 or equivalent, sheared edge, not heat treated, not cleaned or oiled, 3/8 inch to under 1/2 inch in thickness, over 90 inches through 100 inches in width.

Product 9.--Stainless steel plate, HRAP, AISI grade 304, 1/4" (6 mm) thick, 72" (1,827 mm) exact through 96" (2,437 mm) exact in width X 240" (6,091 mm) to 290" (7,360 mm) long, cut to length.

DEFINITIONS--Continued**Pipes and tubes**

Product 10.--Oil-country tubular goods, API 5A, Grade K-55, 7 inches outside diameter, 0.317 inch wall thickness, 23 pounds per foot, PE.

Product 11.--Line pipe, API 5L, Grade X42, 8-5/8 inches outside diameter, 0.322 wall thickness, 28.55 pounds per foot.

Product 12.--Round fence tubing, light wall, galvanized, 1.315 inch outside diameter.

Product 13.--Stainless steel pipe, Grade 304, 1-1/2 inches-4 inches outside diameter, 1/8 inch-3/4 inch wall thickness.

Bars

Product 14.--Hot-rolled carbon steel bars, in cut lengths or coils, 1/2 inch through 6-1/8 inches in diameter/thickness, all shapes except flats, 1000 series, not thermal treated.

Product 15.--Cold-formed carbon steel bars, in cut lengths or coils, 1/2 inch through 6 inches in diameter/thickness, all shapes including flats, 1000 series, not thermal treated.

Product 16.--Deformed reinforcing bars, ASTM 615, Grade No. 40.

Structural shapes and units

Product 17.--Wide-flange carbon steel beams, A-36 or equivalent, 8 inches by 8 inches, 31 through 67 pounds per foot, 40 through 60 feet in length, item order of 5 tons and over.

Rails and related railway products

Product 18.--Carbon steel rails, standard quality, 39 feet in length, 115 lbs. through 140 lbs. per yard.

Wire rods

Product 19.--Hot-rolled carbon steel wire rod, in coils, standard quality, AISI specifications C-1008 through C-1022, 7/32 inch in diameter.

Wire and wire products

Product 20.--Galvanized wire, 12 gauge, soft industrial quality.

DEFINITIONS--Continued

Product 21.--Cold-drawn stainless steel round wire, Grade 304, 1/8 inch in diameter.

Product 22.--Steel wire rope, IPS, 5/8 inch, 6 x 19, IWRC.

Wire and wire products

Product 20.--Galvanized wire, 12 gauge, soft industrial quality.

Product 21.--Cold-drawn stainless steel round wire, Grade 304, 1/8 inch in diameter.

Product 22.--Steel wire rope, IPS, 5/8 inch, 6 x 19, IWRC.

Appendix F

Description of Actions Taken by the Steel Industry to Adjust and Modernize

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(Pages 116 to 130 contain information entitled to confidential treatment
and have not been published.)

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Appendix G

Description of Actions Taken by Major Companies to Maintain
International Competitiveness

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(Pages 132 to 156 contain information entitled to confidential treatment
and have not been published.)

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Appendix H

Final Statistical Tables, July 1, 1984-June 30, 1985

Table H-1.--Certain carbon and alloy steel: U.S. producers' capacity, changes in capacity, production, and capacity utilization, July 1, 1984 -- June 30, 1985

Item	Capacity		Changes in capacity 1/		Production		Capacity utilization	
	Short tons		Percent		Short tons		Percent	
Carbon and certain alloy steel: 2/								
Cokemaking facilities.....	32,249,400		***	23,418,398		73		
Ironmaking facilities.....	75,179,500		***	46,370,344		62		
Steelmaking facilities: 3/								
Electric furnace.....	39,906,440	4/		24,431,699		61		
Basic oxygen furnace.....	72,776,624	4/		49,260,123		68		
Other furnaces.....	13,901,000	4/		6,275,187		45		
Total.....	126,584,064		***	79,967,009		63		
Continuous casting.....	44,718,737	4/		34,064,314		76		
Products:								
Plates.....	8,449,509	-		3,502,962		41		
Sheets and strip:								
Hot rolled.....	58,783,792		***	38,958,983		66		
Cold rolled.....	31,819,884		***	21,858,856		69		
Galvanized.....	6,223,088		***	4,722,262		76		
Other.....	8,682,372		***	6,534,731		75		
Bars:								
Hot finished.....	12,610,215		***	7,067,901		56		
Cold finished.....	***		***	***		***		
Reinforcing.....	5,193,204		***	3,570,171		69		
Wire rod.....	5,488,682		***	3,750,768		68		
Wire.....	1,276,530	-		734,501		58		
Wire products.....	845,257		***	440,709		52		
Structural shapes and units.....	6,604,112		***	3,943,383		60		
Rails and related products.....	1,643,301		***	1,101,022		67		
Pipes and tubes:								
Oil country tubular goods.....	3,140,916		***	1,127,870		36		
Line pipe.....	2,362,584		***	849,892		36		
Other.....	2,337,800		***	955,979		41		
Certain stainless and alloy tool steel:								
Steelmaking facilities: 3/								
Electric furnace.....	***	4/		***		***		
Basic oxygen furnace.....	***	4/		***		***		
Other furnaces.....	***	4/		***		***		
Total.....	2,401,184		***	1,567,084		65		
Continuous casting.....	1,132,365	4/		1,053,692		93		
Stainless steel products:								
Plates.....	203,900	-		144,957		71		
Sheets and strip.....	1,211,854		***	804,751		66		
Wire.....	36,650		***	29,051		79		
Pipes and tubes.....	45,600	-		19,366		42		

1/ Changes in practical annual capacity from July 1, 1983 -- June 30, 1984 to July 1, 1984 -- June 30, 1985.

2/ Certain alloy refers to alloy steel other than stainless and alloy tool steel.

3/ Including semifinished steel.

4/ Change in capacity not calculated.

Table R-2.--Certain carbon and alloy steel: U.S. producers' shipments, unfilled orders, and inventories, and U.S. importers' imports, unfilled orders, and inventories, July 1, 1984 -- June 30, 1985

Product	U.S. Producers					U.S. Importers				
	Shipments		Unfilled orders 1/	Inven- tories 1/	Ratio of inventories to unfilled orders	Imports		Unfilled orders 1/	Inven- tories 1/	Ratio of inventories to unfilled orders
	Quantity	Value				Quantity	Value			
	(short tons)	(1,000 dollars)				(short tons)	(1,000 dollars)			
Carbon and certain alloy steel: 2/			Short tons				Short tons			
Semifinished.....	1,287,751	496,049	174,786	3/	-	725,725	197,957	102,447	***	***
Plates.....	3,485,490	1,629,404	356,537	236,359	0.66	770,798	293,723	104,928	58,171	0.55
Sheets and strip:										
Hot rolled.....	12,617,612	4,492,901	1,332,527	1,521,305	1.14	1,656,067	598,586	301,945	103,739	0.34
Cold rolled.....	10,792,752	5,255,801	1,603,250	1,453,283	0.91	1,630,073	799,070	288,964	166,784	0.58
Galvanized.....	4,153,326	2,542,075	983,182	600,487	0.61	1,435,561	853,872	221,737	81,107	0.37
Other.....	6,757,804	4,173,436	1,108,741	998,481	0.90	370,640	254,929	45,417	9,869	0.22
Subtotal, sheets and strip....	34,321,494	16,464,213	5,027,700	4,573,556	0.91	5,092,341	2,506,457	858,063	361,499	0.42
Bars:										
Hot finished.....	{7,001,961	2,691,714	785,306	{890,223	{1.04	187,251	83,974	10,008	7,727	0.77
Cold finished.....	374,115	70,781	70,781			122,567	77,934	{28,835	15,282	{C.73
Reinforcing.....	3,514,779	1,019,738	265,556	500,459	1.88	149,713	28,409		5,807	
Subtotal, bars.....	10,516,740	4,085,567	1,121,643	1,390,682	1.24	459,531	190,337	38,843	28,816	0.74
Wire rod.....	2,980,424	949,781	166,724	181,867	1.09	535,729	225,227	114,055	3,971	0.03
Wire.....	475,857	276,160	28,583	51,800	1.81	247,341	175,288	39,218	6,938	0.18
Wire products.....	432,691	279,561	23,166	41,807	1.80	388,449	212,472	20,340	***	***
Structural shapes and units.....	3,903,017	1,374,750	284,636	475,309	1.67	1,122,716	408,436	218,985	55,425	0.25
Rails and related products.....	1,072,762	498,069	177,844	59,779	0.34	309,649	141,370	16,613	***	***
Pipes and tubes:										
Oil country tubular goods.....	1,122,308	970,794	112,845	243,780	2.16	631,312	453,508	119,965	207,571	1.73
Line pipe.....	801,817	465,599	{166,935	71,589	{1.48	482,862	237,751	52,598	46,684	0.89
Other.....	843,261	727,487		174,589		758,916	377,008	132,244	51,734	0.39
Subtotal, pipes and tubes....	2,767,386	2,163,880	279,780	489,958	1.75	1,873,090	1,068,267	304,807	305,989	1.00
Total, carbon and certain alloy steel.....	61,243,611	28,217,434	7,641,399	7,501,117	0.98	11,525,369	5,419,534	1,818,299	856,635	0.47
Certain stainless and alloy tool steel:										
Semifinished.....	79,344	218,146	40,233	3/	-	725	1,632	0	***	-
Stainless steel:										
Plates.....	147,917	331,108	14,066	34,988	2.49	4,732	8,159	1,468	***	***
Sheets and strip.....	799,285	1,392,168	116,859	166,075	1.42	74,387	134,169	33,770	***	***
Wire.....	28,881	99,516	3,809	8,241	2.16	2,024	7,159	469	1,269	2.71
Pipes and tubes.....	20,381	91,241	3,814	7,483	1.96	13,891	41,329	3,194	***	***
Total, certain stainless and alloy tool steel.....	1,075,808	2,132,179	178,781	216,787	1.21	95,759	192,448	38,901	51,425	1.32
Grand total.....	62,319,419	30,349,613	7,820,180	7,717,904	0.99	11,621,128	5,611,982	1,857,200	908,060	0.49

1/ As of June 30, 1985.

2/ Certain alloy refers to alloy steel other than stainless and alloy tool steel.

3/ Inventories of semifinished steel intended for sale are estimated by the ITC staff to be negligible.

Sources: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission, except as noted.

Table H-3.--Average number of production and related workers employed in U.S. establishments producing certain carbon and alloy steel and hours worked by, wages paid to, and productivity of such employees, July 1, 1984 -- June 30, 1985

Item	Average number employed	Man-hours (Thousands)	Productivity (man-hours per ton)	Wages (1,000 dollars)	Unit hourly labor costs
Carbon and certain alloy steel: 1/					
Cokemaking facilities.....	13,096	24,451	1.04	366,577	\$14.99
Ironmaking facilities.....	10,249	19,486	0.42	297,519	15.27
Steelmaking facilities 2/.....	34,672	67,624	0.85	1,005,454	14.87
Products:					
Plates.....	7,558	15,766	4.50	235,143	14.91
Sheets and strip:					
Hot rolled.....	24,836	50,586	1.30	790,319	15.62
Cold rolled.....	20,074	42,703	1.95	649,553	15.21
Galvanized.....	5,916	12,780	2.71	189,912	14.86
Other.....	12,297	25,444	3.89	388,260	15.26
Subtotal, sheets and strip.....	63,123	131,513	3/	2,018,044	15.34
Bars:					
Hot finished.....	{ 15,728	{ 30,970	***	{ 459,941	{ 14.85
Cold finished.....			***		
Reinforcing.....	3,311	6,549	1.83	80,398	12.28
Subtotal, bars.....	19,039	37,519	3/	540,339	14.40
Wire rod.....	2,519	4,820	1.28	71,438	14.82
Wire.....	1,845	3,499	4.76	48,091	13.74
Wire products.....	1,437	2,779	6.30	36,602	13.17
Structural shapes and units.....	6,647	14,839	3.76	201,853	13.60
Rails and related products.....	1,260	2,403	2.18	33,049	13.75
Pipes and tubes:					
Oil country tubular goods.....	4,616	9,547	8.46	133,264	13.96
Line pipe.....	{ 9,002	{ 17,717	***	{ 253,377	{ 14.30
Other.....			***		
Subtotal, pipes and tubes.....	13,618	27,264	3/	386,641	14.18
Total, carbon and certain alloy steel.....	175,063	351,963	3/	5,240,750	14.89
Certain stainless and alloy tool steel:					
Steelmaking facilities 2/.....	5,647	10,815	6.90	173,621	16.05
Stainless steel products:					
Plates.....	1,258	2,535	17.49	41,662	16.43
Sheets and strip.....	4,991	9,573	11.90	167,780	17.53
Wire.....	736	1,504	51.77	20,845	13.86
Pipes and tubes.....	540	1,079	55.72	14,137	13.10
Total, certain stainless and alloy tool steel..	13,172	25,506	3/	418,045	16.39
Grand total.....	188,235	377,469	3/	5,658,795	14.99

1/ Certain alloy refers to alloy steel other than stainless and alloy tool steel.

2/ Including semifinished steel.

3/ Not applicable.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

July 1, 1984 -- June 30, 1985

(In thousands of dollars)

Item	Capital expenditures									
	For plant and equipment									
	For existing facilities					For			Research and development	
	Land and land improvement	For new facilities	Placed in service during Jan 1, 1980- June 30, 1984	Placed in service prior to Jan 1, 1980	Total	pollution control or occupational safety and health	Other	Total 1/	expenditures	
Carbon and certain alloy steel: 2/										
Cokemaking facilities.....	-	-	-	-	-	-	-	82,816	7,883	
Ironmaking facilities.....	-	-	-	-	-	-	-	167,159	5,956	
Steelmaking facilities 3/.....	***	***	***	***	***	***	***	1,128,865	22,221	
Products:										
Plates.....	***	***	***	***	***	***	***	***	***	
Sheets and strip:										
Hot rolled.....	***	***	***	***	***	***	***	63,621	4,861	
Cold rolled.....	***	***	***	***	***	***	***	65,251	***	
Galvanized.....	***	***	***	***	***	***	***	18,106	6,128	
Other.....	***	***	***	***	***	***	***	84,277	***	
Subtotal, sheets and strip..	***	***	***	***	***	***	***	231,255	51,033	
Bars:										
Hot finished.....	***	***	***	***	***	***	***	***	***	
Cold finished.....	***	***	***	***	***	***	***	***	***	
Reinforcing.....	***	***	***	***	***	***	***	***	***	
Subtotal, bars.....	***	***	***	***	***	***	***	332,243	8,147	
Wire rod.....	***	***	***	***	***	***	***	***	1,014	
Wire.....	***	***	***	***	***	***	***	***	***	
Wire products.....	***	***	***	***	***	***	***	***	***	
Structural shapes and units....	***	***	***	***	***	***	***	139,851	***	
Rails and related products.....	***	***	***	***	***	***	***	***	***	
Pipes and tubes:										
Oil country tubular goods....	***	***	***	***	***	***	***	***	***	
Line pipe.....	***	***	***	***	***	***	***	***	***	
Other.....	***	***	***	***	***	***	***	***	***	
Subtotal, pipes and tubes..	***	***	***	***	***	***	***	171,924	7,946	
Total, carbon and certain alloy steel.....	7,059	699,634	399,111	868,927	1,966,470	58,781	12,712	2,398,153	113,872	
Certain stainless and alloy tool steel:										
Steelmaking facilities 3/.....	***	***	***	***	***	***	***	51,567	***	
Stainless steel products:										
Plates.....	***	***	***	***	***	***	***	***	***	
Sheets and strip.....	***	***	***	***	***	***	***	36,048	***	
Wire.....	***	***	***	***	***	***	***	***	***	
Pipes and tubes.....	***	***	***	***	***	***	***	21,859	***	
Subtotal, certain stainless and alloy tool steel.....	496	27,071	21,880	67,413	116,364	2,051	197	132,007	18,149	
Grand total.....	7,555	726,705	420,991	936,340	2,082,834	60,832	12,909	2,530,160	132,021	

1/ Including nonitemized expenditures.

2/ Certain alloy refers to alloy steel other than stainless and alloy tool steel.

3/ Including semifinished steel.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table H-5--Certain carbon and alloy steel: Income-and-loss data from U.S. operations, by product, July 1, 1984 -- June 30, 1985

(In thousands of dollars)

Item	Total net sales 1/	Net profit or (loss) before taxes 2/	Net profit or (loss) as a percentage of sales
Carbon and certain alloy steel: 3/			
Semifinished.....	287,905	(32,675)	11.3
Plates.....	1,644,975	(97,814)	(5.9)
Sheets and strip:			
Hot rolled.....	4,533,261	(282,053)	(6.2)
Cold rolled.....	5,270,168	(35,769)	(0.7)
Galvanized.....	3,118,414	106,822	3.4
Other.....	2,891,743	108,670	3.8
Subtotal, sheets and strip....	15,813,586	(102,330)	(0.6)
Bars:			
Hot finished.....	3,059,135	(202,615)	(6.6)
Cold finished.....			
Reinforcing.....	1,149,194	(7,817)	(0.7)
Subtotal, bars.....	4,208,329	(210,432)	(5.0)
Wire rod.....	956,783	(24,642)	(2.6)
Wire.....	276,012	(25,148)	(9.1)
Wire products.....	278,576	(14,088)	(5.1)
Structural shapes and units.....	1,376,896	(120,314)	(8.7)
Rails and related products.....	496,831	(9,913)	(2.0)
Pipes and tubes:			
Oil country tubular goods.....	964,478	(187,672)	(19.5)
Line pipe.....	246,394	(15,388)	(6.2)
Other.....	991,624	(186,230)	(18.8)
Subtotal, pipes and tube.....	2,202,496	(389,290)	(17.7)
Total, carbon and certain alloy steel.....	27,542,388	(1,026,645)	(3.7)
Certain stainless and alloy tool steel:			
Semifinished.....	188,324	2,933	1.6
Stainless steel:			
Plates.....	325,438	143	0.0
Sheets and strip.....	1,379,279	89,331	6.5
Wire.....	99,524	6,128	6.2
Pipes and tubes.....	91,241	(15,486)	(17.0)
Subtotal, certain stainless and alloy tool steel.....	2,083,806	83,049	4.0
Grand total.....	29,626,194	(943,596)	(3.2)

1/ Includes intracompany and intercompany transfers, less discounts, returns, and allowances.

2/ Net profit is defined as the total net sales, less the cost of goods sold, general, selling and administrative expenses, and other expenses (such as net interest expense (or income)).

3/ Certain alloy refers to alloy steel other than stainless and alloy tool steel.

Source: Compiled from data estimated in response to questionnaires of the U.S. International Trade Commission.

Table H-6.—Certain carbon and alloy steel: Financial experience of U.S. producers,
July 1, 1984–June 30, 1985

(In thousands of dollars)			
Item	All carbon and certain alloy ^{1/} steel products subject to the investigation ^{2/}	All stainless and alloy tool steel products subject to the investigation ^{2/}	Total ^{2/}
NET SALES:			
Excluding intracompany and intercompany transfers	24,515,155	2,079,177	26,594,332
Intracompany and intercompany transfers	2,984,727	41,152	3,025,879
Total net sales ^{3/}	30,929,152	2,120,329	33,049,481
COST OF GOODS SOLD (including intracompany and intercompany transfers):			
Raw materials	10,152,771	516,791	10,669,562
Direct labor	5,604,676	292,706	5,897,382
Other factory costs, including depreciation and amortization	13,188,006	597,755	13,785,761
Total cost of goods sold ^{4/}	30,316,608	1,829,981	32,146,589
GROSS PROFIT OR (LOSS)	612,544	290,348	902,892
GENERAL, SELLING, AND ADMINI- STRATIVE EXPENSES	1,267,364	160,690	1,428,054
NET OPERATING PROFIT OR (LOSS)	(654,820)	129,658	(525,162)
OTHER INCOME OR (EXPENSE):			
Net interest income or (expense)	(515,993)	(24,668)	(540,661)
All other income or (expense)	99,046	(15,800)	83,246
Total other income or (expense) ^{5/}	(417,050)	(40,468)	(457,518)
NET PROFIT OR (LOSS) BEFORE TAXES	(1,071,870)	89,190	(982,680)
Depreciation and amortization	1,319,288	49,708	1,368,996

^{1/} Certain alloy refers to alloy steel other than stainless and alloy tool steel.

^{2/} Certain respondents included financial information on related products.

^{3/} Including nonitemized sales.

^{4/} Including nonitemized costs.

^{5/} Including nonitemized expenses.

Source: Compiled from data submitted in response to questionnaires of the U.S.
International Trade Commission.

Table H-7.--Certain carbon and alloy steel: Weighted average net prices for the three largest sales of U.S. producers and importers, 1/ by product, by specified period, July 1984 -- June 1985

Product 2/	(Per ton)							
	Weighted average net price							
	U.S. producers				U.S. importers			
	1984		1985		1984		1985	
	July- September	October- December	January- March	April- June	July- September	October- December	January- March	April- June
Carbon and certain alloy steel: 3/								
Semifinished.....	\$356.14	***	\$392.95	\$380.68	\$223.07	***	***	***
Plates.....	***	***	***	***	360.80	371.92	377.75	369.31
Sheets and strip:								
Hot rolled.....	332.54	313.85	313.68	308.16	334.64	360.46	315.39	323.12
Cold rolled.....	478.95	488.08	462.39	450.23	442.00	460.00	442.59	422.00
Galvanized.....	***	***	***	***	616.01	603.45	621.70	625.18
Other.....	***	***	***	***	***	595.26	***	594.35
Bars:								
Hot finished.....	315.04	309.44	301.77	299.01	384.22	395.46	463.09	464.40
Cold finished.....	***	***	***	***	552.00	578.27	561.89	550.73
Reinforcing.....	279.96	287.01	281.88	282.69	262.13	260.90	264.09	259.29
Wire rod.....	297.08	288.69	282.28	273.82	302.81	302.08	300.13	254.92
Wire.....	***	***	***	***	***	***	***	***
Wire products.....	***	***	***	***	***	***	***	***
Structural shapes and units.....	***	***	***	***	373.13	378.48	389.37	371.14
Rails and related products.....	***	421.60	441.25	455.51	500.35	459.59	480.45	***
Pipes and tubes:								
Oil country tubular goods.....	***	***	***	***	495.05	516.85	***	572.71
Line pipe.....	***	478.99	459.10	***	***	416.20	410.98	***
Other.....	4/	***	4/	4/	506.21	491.53	***	***
Certain stainless and alloy tool steel:								
Semifinished.....	***	1391.93	1416.86	1473.30	4/	4/	4/	4/
Stainless steel:								
Plates.....	***	***	***	***	***	1866.86	1753.46	1800.78
Sheets and strip.....	***	***	***	***	1725.27	***	***	***
Wire.....	***	3544.06	***	***	***	4/	4/	***
Pipes and tubes.....	3502.01	3199.61	3047.12	2969.95	2629.99	2644.76	2879.30	3373.01

1/ Prices are net of all discounts and allowances (including freight allowances) and excluding U.S. inland freight. Producers' prices are f.o.b. mill; importers' prices are f.o.b. warehouse, or, if shipped directly to customers, c.i.f., ex-dock, port of entry, duty paid. Prices represent the total industry value of reported sales divided by the total quantity sold, based on the 3 largest sales of each firm.

2/ See Appendix E for description of products.

3/ Certain alloy refers to alloy steel other than stainless and alloy tool steel.

4/ No data reported.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

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