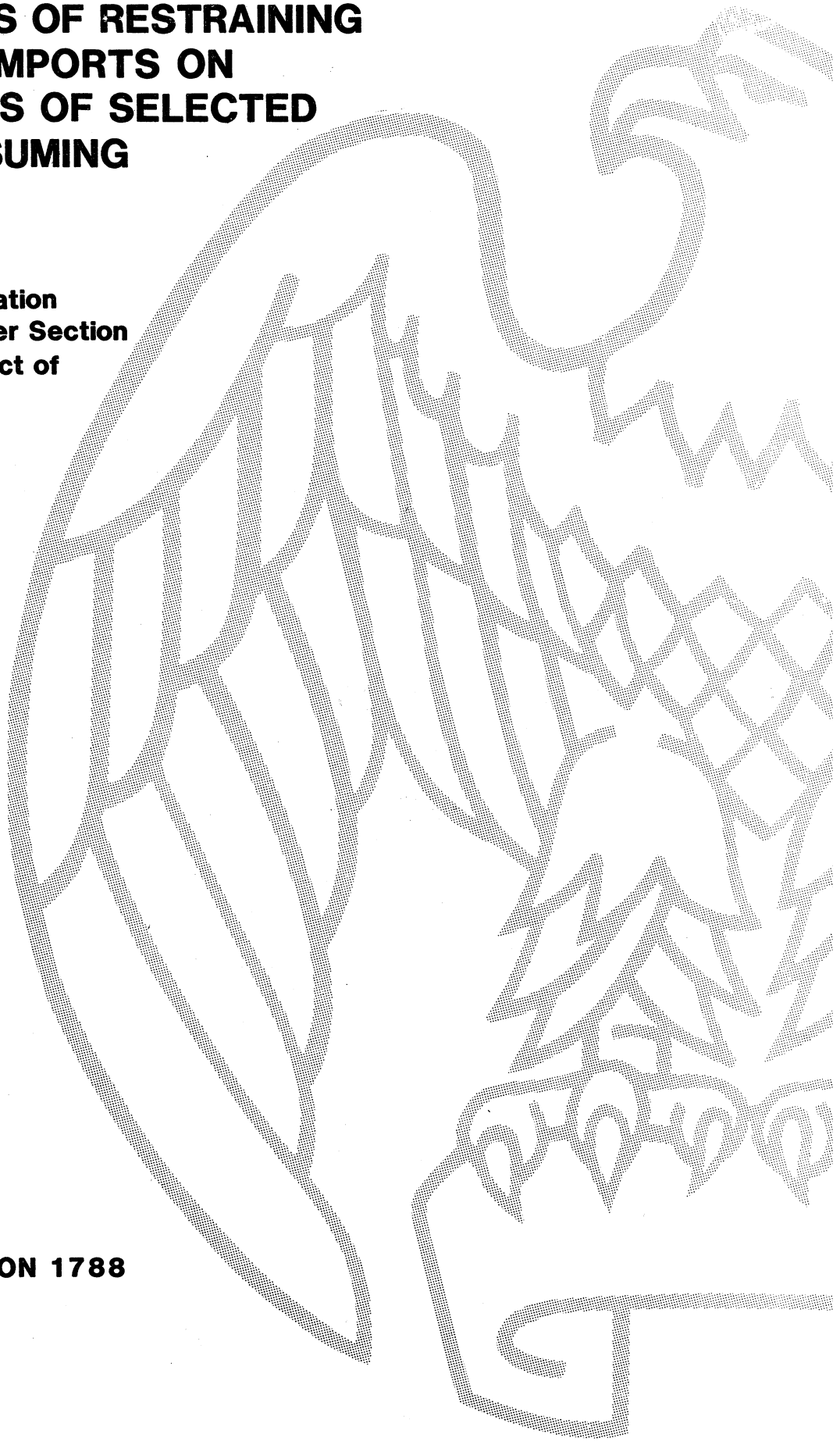
THE EFFECTS OF RESTRAINING U.S. STEEL IMPORTS ON THE EXPORTS OF SELECTED STEEL-CONSUMING INDUSTRIES

Report on Investigation No. 332-214 Under Section 332 of the Tariff Act of 1930



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PREFACE

On June 25, 1985, at the request of the Senate Committee on Finance (see app. A), and in accordance with section 332(g) of the Tariff Act of 1930 (19 U.S.C. 1332(g)), the United States International Trade Commission instituted investigation No. 332-214. This study examines the effects on U.S. exports of recently negotiated and existing voluntary restraint arrangements covering steel mill products. Specifically, it provides estimates of the effect of the Presidents' steel import restraint program on the projected level of exports of U.S. steel-consuming industries from 1985 through September 1989, the effective restraint period. Because the recently negotiated restraints between the United States and 14 non-EC countries were patterned after the U.S.-EC Steel Arrangement, which became effective on October 21, 1982, the study also presents a retrospective assessment of the effect of the Arrangement on the exports of steel-consuming industries. The study also contains case studies of domestic export industries that are dependent upon steel inputs. Each case study describes the industry and assesses the effects of the steel import restraint program on their costs of production, exports, and investment decisions.

Notice of the investigation was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, and by publication of the notice in the Federal Register of July 3, 1985 (50 F.R. 27496), (app. B).

A public hearing in connection with the present investigation was held in the Commission's hearing room on March 12, 1985. The calendar of witnesses who appeared at the hearing appears in appendix C.

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EXECUTIVE SUMMARY

This study examines the economic implications for U.S. steel-consuming industries of existing and recently negotiated voluntary restraint arrangements (VRA's) covering steel mill products. According to the President, restrictions on imports of steel to the United States are designed to allow the "steel industry to adjust and modernize" and "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." 1/ However, if effective, one consequence of the restrictions on imports of steel to the United States is that steel imports are made less price competitive. The reduction of this price advantage has a number of implications for U.S. industries that use steel or steel-containing products. Most significantly, the increased cost of using steel increases production costs for domestic industries and reduces their ability to compete with foreign producers. Since U.S. products containing steel are made relatively more expensive in comparison with competing foreign goods, this could lead to increased import penetration and reduced exports. Moreover, since steel is a basic input whose use is widespread, numerous industries throughout the U.S. economy can be affected by the import relief measures granted to the steel industry. For instance, it is used in the production of consumer durables, such as automobiles and home appliances, and in the production of capital goods, such as industrial tools and machinery and equipment. In addition, because foreign competitors would continue to have access to less expensive foreign steel, some domestic steel-consuming industries might choose to move their production facilities abroad in order to minimize the impact of the foreign price advantage. These efforts to improve their competitiveness could, therefore, also have domestic employment consequences.

The study is organized into three parts. Part one presents a retrospective assessment of the effect of the U.S.-EC Steel Arrangement (which became effective on October 21, 1982), on the exports of steel-consuming industries. The analysis of this section is motivated by the fact that the recently negotiated restraints between the United States and 14 non-EC countries were patterned after the U.S.-EC Steel Arrangement. The section presents an overview of the Arrangement and estimates of its effects on total U.S. exports during 1983 and 1984. The effect of the Arrangement on exports is then contrasted with the effect of changes in the exchange rate. Part two of the study presents an overview of the President's steel import restraint program and provides estimates of its effect on the projected exports of U.S. steel-consuming industries from 1985 through September 1989, the effective restraint period. In parts one and two, the estimates are presented according

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1/ Ronald Reagan, Memorandum for the United States Trade Representative regarding Steel Import Relief Determination, Sept. 18, 1984.

to the 79 industry sector classification of the Bureau of Economic Analysis' input-output table. The final part of the study, part three, presents case studies of domestic export industries that are dependent upon steel inputs. Each case study describes the industry and assesses the effect of the steel import restraint program on the costs of production, exports, and investment decisions.

1. President's Voluntary Export Restraint Program

The findings of this study with respect to the projected impact on the exports of steel-consuming industries are as follows.

- The President's steel import restraint program would raise the price of steel by approximately 2.9 percent in each of the 5 years it is to be in effect. This price increase would lower total U.S. exports by the following amounts:

1985----------	$903 million	(0.39)
1986----------	$1,907 million	(0.77)
1987----------	$3,028 million	(1.15)
1988----------	$4,272 million	(1.54)
1989 (January-September)-	$5,627 million	(1.92)
Total---------	$15,737 million	

The numbers in parentheses represent the estimated percentage reduction in the level of exports during the period. The sector with the largest decline in exports is manufacturing, and this sector accounts for approximately 97 percent of the total decline.

- For the first 8 months of 1985, the import share of steel mill products has averaged 25.5 percent of apparent consumption as compared to the 18.5 percent import share limit set by the President to be achieved in the first year of the program. Since the price of steel may not rise during 1985, as assumed in the analysis of the preceding section, estimates are presented below of the effect of alternative import share assumptions in reducing exports of steel-consuming industries.

Assumed 1985 share of apparent consumption	Reduction of exports	Percentage reduction
18.5----------:	$903 million	(0.39)
20.5----------:	$664 million	(.28)
22.5----------:	$400 million	(.17)
24.5----------:	$108 million	(.05)

The analysis illustrates that the less restrictive the actual import restraints, the lower the impact in reducing U.S. exports, because of the accompanying lessened pressure on the prices of steel.

- The world steel market in recent years can be characterized as a buyers' market, with steel often selling below list price. The disparity has been greatest in the United States where discounts have grown progressively from 1-2 percent in 1981 to almost 20 percent during the January-March 1985. Despite the substantial discounts, U.S. transaction prices have exceeded foreign prices in the respective home markets since 1981; the disparity ranged from 25 to 56 percent during January-March 1985. As indicated in several of the case studies, the disparity in respective home market prices has been reflected in the U.S. market in the form of a two-tiered pricing structure, with U.S. produced steel selling at a premium to imports since 1981.

- Future developments in exchange rates may have a significant impact on the effect of the VRA's on steel-consuming industries. Should a real depreciation of the dollar exceed any increase in the price of imported steel due to the VRA's, the VRA's will no longer be the effective constraint on steel imports. In such a case, the lower-valued dollar would drive sales of imported steel below the levels imposed by the VRA's. Any real depreciation of the dollar, however, will cause exports of steel-consuming industries to become more competitive internationally.

2. U.S.-EC Steel Arrangement

The findings of this study with respect to the U.S.-EC Arrangement and its impact on the exports of steel-consuming industries are as follows.

- The U.S.-EC Arrangement limited or stabilized the share of EC steel mill exports covered by the agreement during 1983 and 1984. Total steel mill exports to the United States from all sources of the products covered by the Arrangement did not change, however, so that the price of steel for domestic users was largely unaffected by the U.S.-EC Arrangement. Under the assumption that without the export restraints the EC would have increased its share of apparent consumption of products covered under the Arrangement at the same rate at which nonEC suppliers increased their share of apparent consumption, the agreements are estimated to have reduced total U.S. exports of steel-consuming industries by $189 million in 1983 and $402 million in 1984. This was 0.09 percent of total U.S. exports

in 1983 and 0.18 percent of U.S. exports in 1984. When contrasted with the estimated effect of the actual movement of the real exchange rate, the effect of the steel restraints is negligible. The reduction in U.S. exports because of the steel restraints was 0.28 percent of the reduction in U.S. exports estimated to have resulted from the movement of the exchange rate in 1983. For 1984, the reduction in U.S. exports because of the steel restraints was 0.70 percent as great as the reduction in U.S. exports because of the movement of the exchange rate.

3. Case Studies of Steel-Consuming Industries

The findings of this study with respect to the effects of the Steel VRA's for the four industries investigated are the following

- o Ball and Roller Bearing Industry

  Bearing steel (wire, wire rod, tube, and bar) is a major component in the production of ball and roller bearings. Industry sources indicate that 90 percent of all bearing steel is imported from Japan, Sweden, the United Kingdom, West Germany, and France. To date, imported steel for use in bearing products is available to U.S. bearing producers in sufficient quantities. Although the price of such steel is said to be priced above that available to foreign producers, especially those in Japan and Europe, the cost of imported bearing steel is less than that available from the domestic industry. The high cost of steel both from imported and domestic sources has become a major concern for the domestic bearing industry. Steel quotas have not yet affected U.S. bearing manufacturers' foreign investment decisions abroad, but sources indicate that higher-priced import steel may force more offshore production by U.S. bearing producers.

- o Construction Machinery and Equipment Industry

  The construction machinery industry is the second largest consumer of steel after the auto industry, accounting for at least 12 percent of total domestic steel shipments (tonnage) from 1980 to 1984. Higher steel prices will have an adverse effect on production costs and exports since raw steel accounts for about 50 percent of total manufacturing costs for the major construction machinery producers and up to 70 percent for replacement parts. U.S. exports of construction machinery declined by 50 percent from $5.7 billion in 1980 to $2.7 billion in 1984. U.S. construction machinery producers have been forced to heavily discount the prices of their exports in order to compete with Japanese manufacturers and other

competitors in the overseas markets. The prospect of higher steel prices, along with other contributing factors hindering demand, has resulted in plant closings, worker layoffs and increased outsourcing of components. [** ** ** ** ** ** ** ** ** ** ** **]

o Pipes and Tubes Industry

Because U.S. participation in the foreign markets for standard items ceased prior to the import agreement, the U.S.-EC Arrangement and subsequent VRA's have had little effect on the exports of commodity pipes and tubes. The steel quotas have hindered the export of specialty and highly-engineered pipes and tubes. Because of the pricing structure created by these import restrictions, some U.S. pipe and tube manufacturers have found that they cannot be competitive in the world markets. In the tubular products industry, import restrictions have increased production costs an estimated 12 to 16 percent, and have caused the loss of several major export contracts. As a result of the loss of competitiveness of some pipe and tube exporters, further investment in U.S. facilities is unlikely.

o Steel Shipping Drums and Barrels Industry

Steel sheets are the only basic steel mill products used in the production of shipping drums. Industry sources have estimated that the cost of steel may be as much as 65 percent of the cost of drum production. Steel prices thus have a significant impact on container production costs. Quoted prices for steel not restricted by import restraints are allegedly 18 to 20 percent lower than quoted prices from both domestic and foreign sources with which restraints are in force. Based on the cited steel usage rate, an 18 to 20 percent disparity in steel prices would translate into a production cost difference of as much as 13 percent. The import restraints and the anticipated resultant increase in the cost of steel are also expected to cause exports of drums, both empty and filled, to lose competitiveness in foreign markets. Price is the most important competitive factor in overseas markets, and an increase in the cost of production is expected to result in a higher total cost for supplying drums to foreign markets. A major drum exporter has indicated that it recently considered investing in a drum operation overseas in order to increase its competitiveness in both foreign and domestic markets. The company decided against the investment, but indicated that this type of foreign investment would become more realistic should business continue to decline.

4. The Reexport Provisions

The firms participating in this investigation expressed considerable dissatisfaction with the substance and administration of the reexport provisions contained in the bilateral agreements imposing restraints on imported steel. The reexport provisions do not permit imports of foreign steel to be credited against the quota if they are reexported after having undergone 'substantial transformation' in the United States. These firms submitted several proposals to liberalize both the reexport provisions and the administrative procedures employed to enforce these provisions in the United States. In general, these proposals all require some renegotiation of the current arrangements and would almost surely require some modification to the administrative procedures which enforce these agreements.

5. Summary of Methodology

Although the intensity of steel use varies by industry, steel is an input into the production process of most industries in a modern industrial economy such as the United States. As a consequence, any trade action that affects the price of steel has ramifications for the costs of production in most industries. Thus parts one and two of this study determine the effect that steel export restraint programs have on the exports of all U.S. industries. The third part of this study consists of a detailed analysis of four industries that are heavy steel users and the most likely effects of the increase in the price of steel on their exports.

The effect of an increase in the price of steel on the exports of steel-consuming industries, on an aggregate level, was determined in four basic steps. First, projections were made of the level of steel imports in the absence of any restraints. These projections were then compared with the level of steel imports which would exist under import restraints to determine the reduction in these imports. Second, elasticities of demand and supply for domestic and imported steel were used to determine the increase in the price of steel caused by the reduction in imports. 1/2/ Third, the estimated

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1/ As is common methodologically, the analysis of this study also focuses on the effect on the total market for steel mill products, given the degree of substitution in demand and supply.

2/ Throughout this study reference is made either to the price of steel or the weighted-average price of steel in the United States. The weighted-average price is the sum of the import price multiplied by the share of imports in total demand plus the domestic price of steel multiplied by the share of total domestic production in total demand. The weighted-average price can be thought of as the price that the average steel consumer would face if he or she bought imported and domestic steel in the same proportions as they are consumed in the U.S. market.

increase in the price of steel was used in conjunction with the Bureau of Economic Analysis' input-output table for the United States to determine the increase in the costs of production for the 79 input-output industry sectors. 1/ Lastly, the resulting increase in the price in each sector was multiplied with estimates of the elasticity of foreign demand for U.S. exports to determine the reduction in U.S. exports. Appendices D through F outline the methodology and assumptions employed in greater detail.

The detailed industry studies relied principally on data gathered from various public and private sources and from telephone and field interviews. Each study describes the domestic industry and the export market, and assesses the effect of the steel import restraint program on the export competitiveness of the respective industry.

1/ U.S. Bureau of Economic Analysis, "The Input-Output Structure of the U.S. Economy, 1977," The Survey of Current Business, May 1984.

OVERVIEW OF EXPORTING INDUSTRIES THAT ARE STEEL CONSUMERS

Steel-consuming industries that are also exporters can be ranked according to three characteristics: (1) importance of the industry's steel purchases relative to total U.S. steel purchases, (2) steel use as a share of the industry's total costs of production, and (3) importance of the industry's exports relative to total U.S. exports. In this section, these characteristics are used to provide an overview of important steel-consuming industries in the United States.

With respect to the first characteristic, sales of steel mill products in the domestic market are made either to end users or to steel service centers/distributors, which sell to end users. In 1984, about 25 percent of all domestically produced steel mill products was shipped to service centers/distributors and 75 percent went to end users. 1/ The two largest end-user markets in 1984 were the automotive and construction industries, which accounted for approximately 18 percent and 14 percent, respectively, of total U.S. producers' shipments of steel mill products (table 1). Other major markets included producers of containers, packaging, and shipping materials (6 percent), and machinery, industrial equipment, and tools (4 percent).

As documented in a number of studies, although cyclical fluctuations in U.S. aggregate economic activity have a pronounced effect on steel use, the intensity of steel use in a wide number of applications has declined in recent years. The auto industry is a major example. It has reduced the size and weight of automobiles and replaced steel with lighter weight substitutes. Nonetheless, this more recent overview of the end users of steel mill products still conforms with the picture presented by the 1977 input-output table. The 20 largest users, according to table 2, include the major end-user markets identified in Table 1. At the two-digit level, the largest user of steel was the motor-vehicles and equipment industry (input-output industry 59), which used 9,471 million dollars' worth of steel in 1977. It was followed principally by producers of capital goods and consumer durables.

1/ End-use markets identified by the American Iron & Steel Institute include the following: steel for converting and processing; independent forgers (not elsewhere classified); industrial fasteners; construction and contractors' products; automotive; rail transportation; shipbuilding and marine equipment; aircraft and aerospace; oil and gas industry; mining, quarrying, and lumbering; agricultural; machinery, industrial equipment and tools; electrical equipment; appliances, utensils and cutlery; other domestic commercial equipment; containers, packaging, and shipping materials; ordnance and other military; export; and nonclassified shipments. Steel service centers and distributors, which function as middlemen between the steel mills and the final customers, perform various services including warehousing and processing steel, i.e., cutting, slitting, shearing, rolling, or bending the metal to meet customer specifications.

Table 1.--Steel mill products: U.S. producers' shipments by major markets, 1980-84, January-June 1984, and January-June 1985

Market	1980	1981	1982	1983	1984	January-June	
						1984	1985
	Quantity (1,000 tons)						
Steel service centers	16,172	17,637	13,067	16,710	18,364	9,621	8,731
End users:							
Automotive	12,124	13,154	9,288	12,320	12,882	6,594	6,822
Construction and contractors' products	11,890	11,676	8,570	9,974	10,153	4,636	4,489
Containers, packaging, and shipping materials	5,551	5,292	4,470	4,532	4,352	2,267	2,041
Machinery, industrial equipment, and tools	4,543	4,624	2,584	2,484	2,886	1,532	1,143
Electrical equipment	2,441	2,600	2,003	2,337	2,365	1,292	962
Oil and gas industry	5,371	6,238	2,745	1,296	2,003	802	876
All other	25,761	27,229	18,840	17,930	20,734	12,784	11,949
Total	83,853	88,450	61,567	67,583	73,739	39,528	37,013
	Percent of total						
Steel service centers	19.3	19.9	21.2	24.7	24.9	24.3	23.6
End users:							
Automotive	14.5	14.9	15.1	18.2	17.5	16.7	18.4
Construction and contractors' products	14.2	13.2	13.9	14.8	13.8	11.7	12.1
Containers, packaging, and shipping materials	6.6	6.0	7.3	6.7	5.9	5.7	5.5
Machinery, industrial equipment, and tools	5.4	5.2	4.2	3.7	3.9	3.9	3.1
Electrical equipment	2.9	2.9	3.3	3.5	3.2	3.3	2.6
Oil and gas industry	6.4	7.1	4.5	1.9	2.7	2.0	2.0
All other	30.7	30.8	30.6	26.5	28.1	32.3	32.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: American Iron & Steel Institute.

Table 2--The 20 largest users of steel at the 2-digit level, ranked by use, 1977

(In millions of dollars)

Rank	Input-output sector	Description	Value
1	37	Primary iron and steel manufacturing	1/ 13,116
2	59	Motor vehicles and equipment	9,471
3	40	Heating, plumbing, and structural metal products	5,700
4	41	Screw machine products and stampings	5,318
5	11	New construction	4,569
6	42	Other fabricated metal products	3,791
7	45	Construction and mining machinery	2/ 2,880
8	39	Metal containers	3/ 2,557
9	49	General machinery and equipment	4/ 2,036
10	61	Other transportation equipment	1,993
11	44	Farm and garden machinery	1,432
12	43	Engines and turbines	1,373
13	47	Metalworking machinery and equipment	1,181
14	53	Electric industrial equipment and apparatus	1,161
15	12	Maintenance and repair construction	1,081
16	52	Service industries machines	938
17	54	Household appliances	894
18	48	Special industry machinery and equipment	765
19	60	Aircraft and parts	718
20	23	Other furniture and fixtures	709

1/ The steel pipes and tubes industry (input-output industry 37.0105) is reviewed in greater detail on pages 58-64.

2/ The construction machinery and equipment industry (input-output industry 45.0100) is reviewed in greater detail on pages 52-58.

3/ The metal barrels, drums, and pails industry (input-output industry 39.0200) is reviewed in greater detail on pages 65-72.

4/ The ball and roller bearings industry (input-output industry 49.0200) is reviewed in greater detail on pages 48-52.

Source: Bureau of Economic Analysis, U.S. Department of Commerce.

Although the above refers only to the major purchasers of steel, the product is used by virtually all industries in the United States. According to the 1977 input-output table for the United States, all but 11 of the 79 industry sectors made direct purchases of steel. Of the 11 that did not directly purchase steel, 7 were service sectors: radio and TV broadcasting (input-output industry 67); electric, gas, water, and sanitary services (input-output industry 68); real estate and rental (input-output industry 71); eating and drinking places (input-output industry 74); automobile repair and services (input-output industry 75); amusements (input-output industry 76); and State and local government enterprises (input-output industry 79). Moreover, there was not a single sector that did not use steel either directly or indirectly through purchases of products containing steel. Thus, an increase in the price of steel has implications for all sectors in the U.S. economy.

In addition to the amount of steel purchased from the steel industry, an industry can be characterized by its steel-intensiveness: the amount of steel that it uses in production relative to its total production costs. As a measure of the steel-intensiveness of an industry, the direct requirements coefficient indicates the cost of steel, purchased directly from the steel industry, that is required to produce a dollar's worth of the industry's output. 1/2/ For instance, the industry with the highest steel-intensity at the two-digit level is the metal containers industry (input-output industry sector 39). To produce a dollar's worth of output, the industry requires over 29 cents in steel. Table 3 lists the first 20 sectors of the input-output table in descending order by direct requirements coefficient.

Table 4 lists the 20 largest exporting industries in the United States. Among those listed, two major steel-consuming industries (both in terms of steel use and steel-intensity) are included: the Construction and mining equipment industry, and the General machinery and equipment industry.

This section has briefly reviewed the major steel-consuming industries. In the following sections, we conduct an analysis of the effects of the steel restraints on their exports.

1/ Another measure of steel-intensity is the total requirements coefficient. It reflects the amount of steel used directly and indirectly, i.e. steel embodied in products used as inputs by the industry, as well as steel purchased directly from the steel industry. Rankings by either measure would remain essentially unchanged.

2/ The steel cost share represented by the direct requirements coefficient differs from the estimates of steel cost as a share of production costs presented in the cases studies. The difference is only definitional; the total cost used in the direct requirement coefficients is inclusive of value-added, i.e. compensation to employees, profit-type income, net interest, capital consumption allowances, and indirect taxes.

Table 3--The 20 users of steel at the 2-digit level, ranked by direct requirements coefficients

Rank	Input-output sector	Description	Direct requirements coefficients
1	39	Metal containers	1/ 0.291
2	41	Screw machine products and stampings	.266
3	40	Heating, plumbing, and structural metal products	.212
4	37	Primary iron and steel manufacturing	2/ .201
5	45	Construction and mining machinery	3/ .162
6	42	Other fabricated metal products	.145
7	43	Engines and turbines	.133
8	46	Materials handling machinery and equipment	.132
9	49	General machinery and equipment	4/ .126
10	44	Farm and garden machinery	.124
11	23	Other furniture and fixtures	.111
12	61	Other transportation equipment	.092
13	47	Metalworking machinery and equipment	.090
14	48	Special industry machinery and equipment	.088
15	54	Household appliances	.085
16	59	Motor vehicles and equipment	.081
17	52	Service industries machines	.078
18	50	Miscellaneous machinery, except electrical	.074
19	53	Electric industrial equipment and apparatus	.066
20	55	Electric wiring and lighting equipment	.062

1/ The metal barrels, drums, and pails industry (input-output industry 39.0200) is reviewed in greater detail on pages 65-72.

2/ The steel pipes and tubes industry (input-output industry 37.0105) is reviewed in greater detail on pages 58-64.

3/ The construction machinery and equipment industry (input-output industry 45.0100) is reviewed in greater detail on pages 52-58.

4/ The ball and roller bearings industry (input-output industry 49.0200) is reviewed in greater detail on pages 48-52.

Source: Bureau of Economic Analysis, U.S. Department of Commerce.

Table 4--The 20 users of steel at the 2-digit level, ranked by value of exports, 1984 1/

(In millions of dollars)

Rank	Input-output sector	Description	Exports
1	1	Livestock and livestock products	26,842
2	59	Motor vehicles and equipment	16,712
3	51	Office computing and accounting machines	15,195
4	60	Aircraft and parts	14,740
5	27	Chemicals and selected chemical products	14,266
6	14	Food and kindred products	11,561
7	64	Miscellaneous manufacturing	7,947
8	56	Radio, TV, and communication equipment	6,190
9	45	Construction and mining machinery	2/ 5,800
10	38	Primary nonferrous metals manufacturing	5,602
11	62	Scientific and controlling instruments	5,586
12	31	Petroleum refining and related industries	4,982
13	20	Lumber and wood products, except containers	4,937
14	7	Coal mining	4,652
15	24	Paper and allied products, except containers	4,572
16	28	Plastics and synthetic materials	4,445
17	43	Engines and turbines	4,263
18	53	Electric industrial equipment and apparatus	3,716
19	49	General machinery and equipment	3/ 3,453
20	58	Miscellaneous electrical machinery and supplies	3,311

1/ F.a.s. value of exorts by the industry in 1984.

2/ The construction machinery and equipment industry (input-output industry 45.0100) is reviewed in greater detail on pages 52-58.

3/ The metal barrels, drums, and pails industry (input-output industry 39.0200) is reviewed in greater detail on pages 65-72.

Source: Compiled from official statistics of the U.S. Bureau of the Census.

ASSESSMENT OF THE EFFECTS OF THE U.S.-EC STEEL ARRANGEMENT ON U.S. EXPORTS

On October 21, 1982, the Arrangement Concerning Trade in Certain Steel Products between the European Coal and Steel Community (ECSC) and the United States (the Arrangement) became effective. Under the terms of the Arrangement, 1/ exports of certain steel products from the European Community (EC) are to be limited to a share of apparent U.S. consumption from November 1, 1982 through December 31, 1985. The objective of the Arrangement is to allow time for restructuring of the ECSC steel industry and to allow for modernization and structural change in the U.S. steel industry, by creating a period of trade stability between the U.S. and the European Community.

This section provides an overview of the Arrangement and an estimate of its maximum impact on the exports of steel-consuming industries. This maximum effect is then contrasted with the effect on exports of the movement of the real exchange rate.

Overview of U.S.-EC Steel Arrangement

As indicated above, exports of certain steel products from the EC are to be limited to a share of apparent consumption from November 1, 1982, through December 31, 1985. The 15 steel products subject to the Arrangement, the 10 product categories into which they are grouped, and the share of apparent U.S. consumption to which imports are to be limited are as follows: 2/

1. Hot-rolled sheet and strip (6.81 percent):
   Hot-rolled carbon sheet and strip
   Hot-rolled alloy sheet and strip

1/ The arrangement is set forth as app. III to a Department of Commerce notice terminating certain countervailing duty and antidumping investigations at 47 F.R. 49058 (Oct. 29, 1982). The DOC Notice is reproduced as app. G to this report. The arrangement was also published by the Council of the European Communities. Council Regulation (EEC) No 2869/82 of 21 October 1982, 25 O.J. EUR. COMM. (No. L 307) 1 (1982).

2/ Article 1 defines "Arrangement products" as those subject to restraint from Nov. 1, 1982, to Dec. 31, 1985. Article 3(a) enumerates the "Arrangement products" (e.g., certain sheet, strip, plate, etc.). Article 3(b) defines "certain steel products" as those described in appendix E to the Arrangement (basically this appendix covers most AISI import categories except pipes and tubes).

2. Cold-rolled sheet (5.11 percent):
   Cold-rolled carbon sheet
   Cold-rolled alloy sheet

3. Plate (5.36 percent):
   Carbon plate
   Alloy plate

4. Structurals (9.91 percent):
   Alloy structural shapes
   Carbon structural shapes

5. Wire rod (4.29 percent):
   Carbon wire rod

6. Hot-rolled bar (2.38 percent):
   Hot-rolled carbon bar
   Hot-rolled alloy bar

7. Coated sheet (3.27 percent):
   Carbon- and alloy-coated sheet and terne plate and sheet

8. Tin plate (2.20 percent):
   Tin plate

9. Rails (8.90 percent):
   Carbon and alloy rails

10. Sheet piling (21.85 percent):
    Carbon and alloy sheet piling.

The Arrangement is administered through a system under which EC officials issue export licenses and certificates covering the subject products. The certificates are then required as a condition of entry into the U.S. market. Import data are monitored by U.S. officials, who meet regularly with their EC counterparts to exchange information and discuss any issues associated with the Arrangement.

Under the U.S. - EC Arrangement, provisions were made for consultations if imports from the EC of "consultation" products (steel products other than Arrangement products or of alloy Arrangement products) showed a significant increase. 1/ As the result of an increase in U.S. imports of consultation

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1/ The obligation to consult ("consultation products") is imposed by art. 10, with respect to the "certain steel products" described in app. E, if import trends "impair or threaten to impair the attainment of the objectives" of the Arrangement. Such consultations may lead to the designation of additional "Arrangement products" which are then subject to restraint under Articles 3 and 4.

products, U.S. and EC officials negotiated in August 1985, the Complementary Product Arrangement to control exports of these products. 1/ In effect from August 1, 1985 through December 31, 1985, the Complementary Product Arrangement amended the 1982 Arrangement by limiting EC shipments of certain consultation products to 197,917 short tons for the remainder of 1985.

The 11 product categories subject to the Complementary Product Arrangement and the allowable tonnage for each category are as follows:

	Product	Export ceiling (short tons)
1.	Alloy wire rod	9,241
2.	Round and flat wire	73,090
3.	Wire products	5,164
4.	Black plate	23,856
5.	Electrical sheet and strip	10,870
6.	Tin-free steel	17,498
7.	Cold-rolled strip	13,393
8.	Cold-finished and other bar	32,275
9.	Bar shapes under 3 inches	9,212
10.	Concrete reinforcing bars	780
11.	Rail products	2,538
		197,917

As a condition of the EC Arrangement, the U.S. and EC negotiated an export restraint arrangement on pipes and tubes. 2/ The Pipe and Tube Accord, in effect from January 1, 1985 through December 31, 1986, limited EC exports of pipe and tube products to 7.6 percent of the U.S. market. Oil country tubular goods, which account for the greatest portion of pipe and tube imports from the EC, were allowed a 10 percent market share for that product.

1/ The date of this arrangement is as set forth by the EC. Complementary Arrangement in the Form of an Exchange of Letters to the 1982 Arrangement Concerning Trade in Certain Steel Products between the European Communities and the United States of America, 28 O.J. EUR. COMM. (No. L 215) 2 (1985).

2/ The date of this arrangement is as set forth by the EC. Arrangement in the Form of an Exchange of Letters between the European Communities and the United States Concerning Trade in Steel Pipes and Tubes, 28 O.J. EUR. COMM. (No. L 9) 2 (1985). There are different views concerning the legal status and substantive obligations, if any, of a prior arrangement covering pipes and tubes dated Oct. 21, 1982. For details, see the discussion contained in the section entitled The Reexport Provisions.

In connection with the President's steel program, a new EC Arrangement has been negotiated which provides for market share or export tonnage allowances for 33 product categories, including the original ten Arrangement product categories, the 11 consultation product categories, and several new product categories. The Arrangement also provides for the extension of the Pipe and Tube Accord until September 30, 1989. Semifinished steel will remain as a consultation product. The new EC Arrangement, effective from January 1, 1986 through September 30, 1989, will hold EC exports of finished steel mill products to about 5.5 percent of U.S. apparent consumption. 1/

Estimating the Effect of the U.S.-EC Arrangement on the Exports of Steel-Consuming Industries 2/

In order to assess the effects of a steel export restraint program, projections must first be made of the level of steel imports in the absence of the program. These projections are then compared with the actual level of imports to determine the apparent reduction in steel imports caused by the restraints. However, since the EC Arrangement applies only to a limited set of countries, two issues are involved in assessing the effect of the agreement on imports. The first is whether it was effective in limiting EC steel exports to the United States; the second is whether it was effective in limiting total U.S. steel imports, those from the rest of world (ROW), as well as those from the EC.

Our analysis indicates that the restrictions were effective in limiting EC exports of products subject to the Arrangement. Figure 1 shows how the EC share of total imports of products covered by the agreement fell in 1981, the period prior to the implementation of the Arrangement, through 1984. The EC share was 38.4 percent in 1981, 29.9 percent in 1983 3/, and 21.4 percent in 1984. In other words, the share declined by 22 percent from 1981 to 1983 and by an additional 28 percent from 1983 to 1984. The volume of exports to the United States from the EC of products covered by the Arrangement appears to have followed a similar pattern. Figure 2 shows that this volume fell continuously throughout the period. 4/

Although it appears that the EC Arrangement did effectively restrict or stabilize the EC share of total U.S. imports of steel mill products (see fig. 3), its effectiveness in reducing the overall level of U.S. steel imports is more difficult to assess. Although we have no information on what EC and ROW exports would have been in the absence of the restraints, it appears that any reduction by the EC was outweighed by changes in the ROW supply.

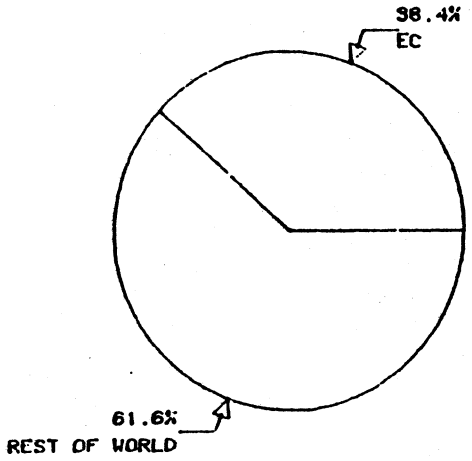
1/ The new EC Arrangement was ratified by the EC on December 10, 1985.

2/ Apps. D through F outline the methodology and assumptions employed in this section in greater detail.

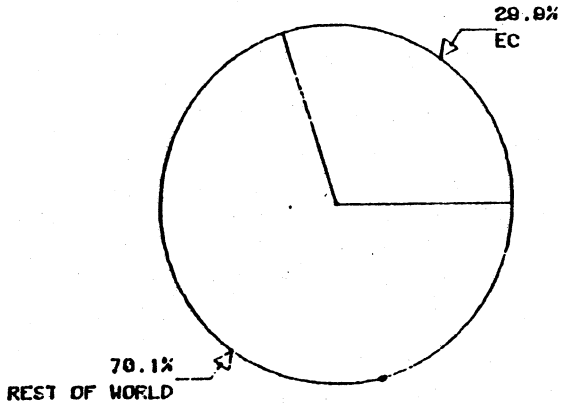
3/ 1983 numbers refer to the period Oct. 1, 1982, to Dec. 31, 1983. To facilitate comparisons, they have been adjusted to an annual basis. The adjustment has no effect on the analysis.

4/ In contrast, the volume of ROW exports to the United States of products covered by the Arrangement increased from 1981 through 1984. (See figure 2.)

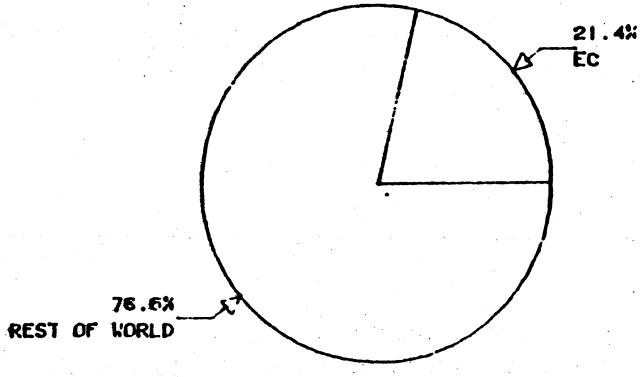
Figure 1.--EC share of total U.S. imports of steel mill products subject to EC Arrangement, 1981, 1983, and 1984



IMPORT SHARE 1981



IMPORT SHARE 1983



IMPORT SHARE 1984

Source: Compiled from data in the U.S. International Trade Commission, Monthly Report on Selected Steel Industry Data, various issues.

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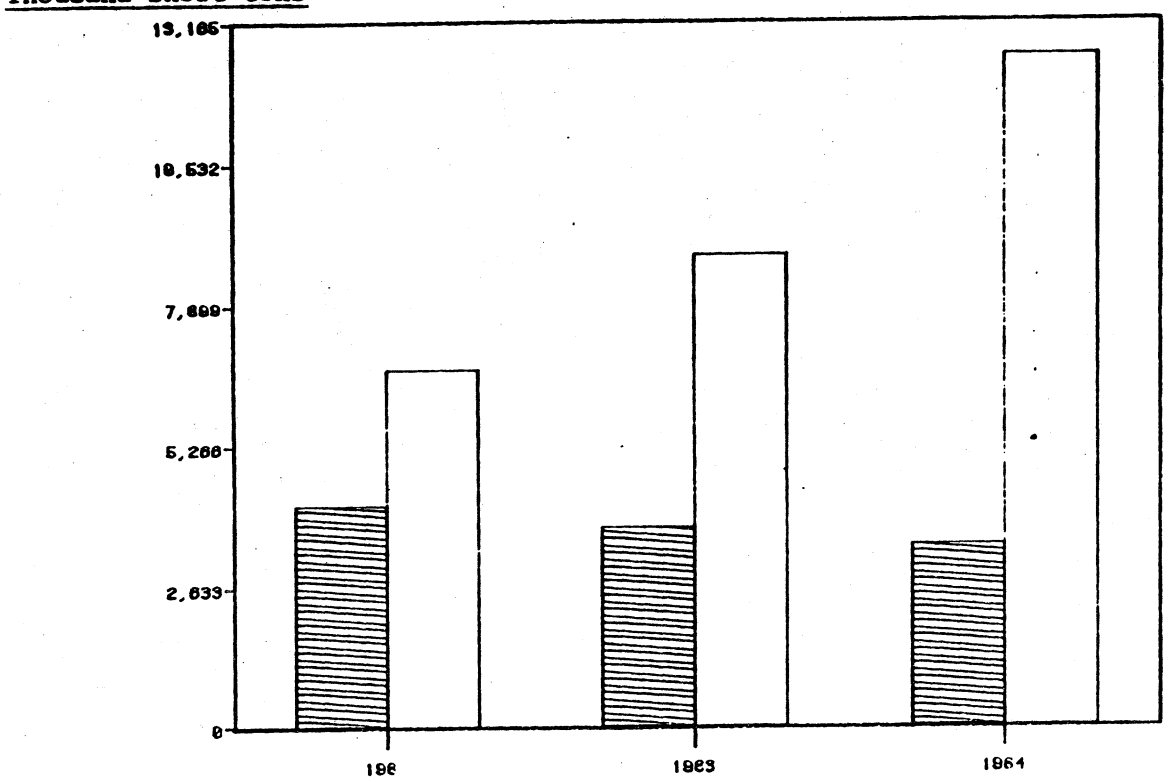
Figure 2.--EC and ROW exports to the United States of steel mill products subject to EC arrangement, 1981, 1983, and 1984



Source: Compiled from data in the U.S. International Trade Commission, Monthly Report on Selected Steel Industry Data, various issues.

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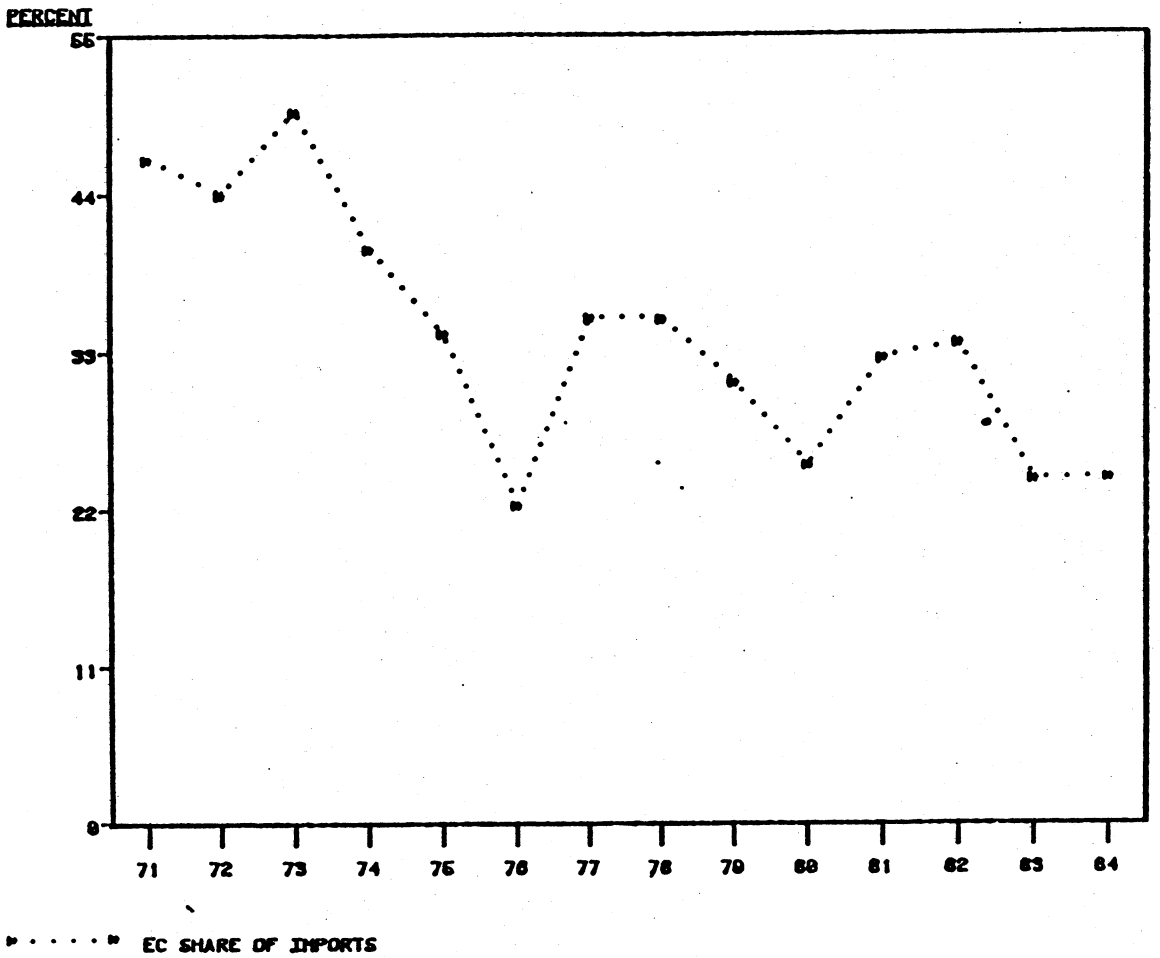
Figure 3.--EC shares of U.S. imports of steel mill products, 1971-84



Source: Compiled from statistics of the American Iron & Steel Institute.

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On a net basis, imports from the ROW increased by 2.117 million tons, from 6.7 million tons in 1981 to 8.8 million tons in 1983. During this same period, imports from the EC fell 0.415 million tons (see table 5).

To obtain an estimate of the impact of the EC Arrangement on the volume of steel mill imports and, in turn, on the weighted-average price of steel mill products, we construct an upper-bound estimate of the reduction in total steel mill imports. To do so, we first assume that ROW suppliers did not alter their behavior. That is, their U.S. exports were the same as they would have been if no agreement had been in place. Second, and most importantly, we assume that the EC would have increased its share of apparent consumption of products covered under the Arrangement at the same rate at which the ROW suppliers increased their share of apparent consumption. As shown in table 6, this would raise the EC share of apparent consumption from 5.49 percent to 8.73 percent in 1983 and from 4.79 percent to 12.30 percent in 1984. This would, in turn, increase EC imports covered by the Arrangement from 3.758 million tons to 5.643 million tons in 1983 and from 3.416 million tons to 8.347 million tons in 1984. These assumptions lead to an overestimate of the EC share for the following reasons:

1. Because the restraints applied only to the EC, it is highly likely that ROW suppliers responded to the EC Arrangement by replacing some EC exports. By ignoring the fact that ROW exports replaced EC exports, the above assumption overestimates the reduction in total U.S. imports of steel brought about by the Arrangement.

2. During the period under the Arrangement, the EC was reducing its capacity, and other suppliers were expanding their capacity. As a result, the EC would probably not have raised its share of apparent consumption at the same rate as the ROW. In fact its share of apparent consumption has been declining since the peak reached in 1973. The EC share of apparent consumption has never exceeded the 1973 level of 8.3 percent, whereas it averaged 5.08 percent from 1972 to 1981. Yet, both the average and the previous high are exceeded by the projection in the first year. In addition, the projected 1984 EC level of exports to the U.S. of steel mill products subject to the Arrangement, 8.73 million tons, alone exceeds the previous high of 8.513 million tons attained by the EC for all steel mill products in 1971.

3. If trade diversion has occurred from products covered within the Arrangement to products not covered, then the above assumption again leads to an upward bias in the estimated effect of the export limits. With trade diversion by the EC, the decline in total steel mill exports would not have been as large as projected.

Table 6 shows the effect that the implied reductions in imports of EC steel mill products would have had on the supply of total steel mill products and table 7 indicates the respective impact on the weighted-average price of steel mill products in the United States. Steel mill imports would have been 9.9 percent higher in 1983 under this "worst case" scenario and 18.9 percent higher in 1984. As a result of this decline in supply, the weighted-average price of steel was 0.73 percent higher in 1983 and 1.62 percent higher in 1984, under this "worst case" scenario, than it would have been without any steel export restraint program.

Table 5.--Steel mill products: 1/ Apparent consumption and total EC, and ROW imports, 1981, 1983, 2/ and 1984

Period	Apparent consumption	Imports			Share of apparent consumption		
		Total	From EC	From ROW	Total	From EC	From ROW
	1,000 short tons				Percent		
Total steel mill products							
1981	105,444	19,898	6,482	13,416	18.87	6.15	12.72
1983	91,611	18,984	4,994	13,990	20.72	5.45	15.27
1984	98,923	26,164	6,335	19,829	26.45	6.40	20.05
Total steel mill products subject to U.S.-EC Arrangement 3/							
1981	70,974	10,880	4,173	6,707	15.33	5.88	9.45
1983	68,394	12,582	3,758	8,824	18.40	5.49	12.90
1984	71,297	15,954	3,416	12,538	22.38	4.79	17.59
Total steel mill products outside the U.S.-EC Arrangement							
1981	34,470	9,018	2,309	6,709	26.16	6.70	19.46
1983	23,217	6,316	1,236	5,166	27.20	5.32	22.25
1984	27,626	10,210	2,919	7,291	36.96	10.57	26.39

1/ Carbon, stainless, and alloy steel, whether or not subject to the Arrangement Concerning Trade in Certain Steel Products; which became effective in October 1982.

2/ Quantities for October 1982 through December 1983 have been adjusted to an annual basis to facilitate comparisons with other years. Percentages remain unaffected.

3/ Comprise 15 categories subject to the US-EC Arrangement.

Source: Compiled from data of the U.S. International Trade Commission's, Monthly Report on Selected Steel Industry Data, various issues.

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Table 6.--Steel mill products: Projected increases 1/ in EC exports and share of apparent consumption of steel mill products subject to the EC Arrangement and the effect on the U.S. share of apparent consumption of total steel mill products, 1981, 1983 2/ and 1984

Period	EC steel mill exports to the United States subject to the EC Arrangement			
	Actual	Projected	Share of apparent consumption	
			Actual	Projected
	1,000 short tons		Percent	
1981	4,173	0	5.88	0
1983	3,758	5,643	5.49	8.73
1984	3,416	8,347	4.79	12.30

Period	Total steel mill exports to the United States, all products				
	Actual	Projected	Percentage change in exports	Share of apparent consumption	
				Actual	Projected
	1,000 short tons			Percent	
1981	19,898	0	0	18.87	0
1983 2/	18,984	20,869	9.9	20.72	22.32
1984	26,164	31,095	18.9	26.45	29.94

1/ "Worst-case" projection based on assumption that EC share of apparent consumption of products subject to EC Arrangement would have increased at the same rate as the share of non-EC suppliers in products subject to the EC Arrangement. The projected level was computed using the formula, $s_p[AC - M^{ec}]$, where s_p is the projected share of apparent consumption, AC is apparent consumption in 1983 and 1984, and M^{ec} are actual EC exports of steel mill products subject to the Arrangement in 1983 and 1984.

2/ Quantities for 1983 refer to the period October 1982-December 1983, which have been adjusted to facilitate comparisons. The percentages remain unaltered.

Source: Compiled from data in the U.S. International Trade Commission's, Monthly Report on Selected Steel Industry Data, various issues.

Table 7.--Estimated 1/ effect of the EC Arrangement on the weighted-average price of steel in the United States, 1983 2/ and 1984

Period	Percentage change in--		
	Domestic price	Import price	Weighted-average price
"Worst Case" EC Arrangement			
1983	0.28	2.32	0.73
1984	0.50	4.24	1.62

1/ These are "worst-case" estimates based on the assumption that EC share of apparent consumption of products subject to EC Arrangement would have increased at the same rate as the share of non-EC suppliers in products subject to the EC Arrangement.

2/ 1983 refers to the period October 1982-December 1983, which have been adjusted to facilitate comparisons. The percentages remain unaltered.

Table 8 presents the industry-by-industry effect that these steel price increases would have on U.S. exports and table 9 summarizes the effects by sector. As can be seen from table 9, all but the services industries are affected by an increase in the price of steel. The industries that experience the largest absolute changes in U.S. exports are those concentrated among input-output sectors 37 through 64, principally manufacturing. The summary in table 9 shows that 97 percent of the total change in exports is because of changes in manufacturing exports. The agriculture and mining sector account for the next largest declines. The 10 industries that experienced the largest declines in exports during 1983 and 1984 are as follows (in thousands of dollars):

Input-output sector	Industry	Change in exports 1/ for 1983	Change in exports 1/ for 1984
59	Motor vehicles and equipment	-42,984	-100,242
60	Aircraft and parts	-23,441	-42,414
45	Construction and mining machinery	-10,686	-20,750 2/
43	Engines and turbines	-6,220	-13,123
51	Office, computing, and accounting machines	-13,061	-31,388
47	Metalworking machinery and equipment	-7,613	-15,206
61	Other transportation equipment	-6,685	-10,793
49	General machinery and equipment	-4,607	-9,185 3/
53	Electric indust. equipment and apparatus	-4,535	-9,275
58	Misc. electrical machinery and supplies	-5,824	-13,361

1/ Exports are f.a.s. (free alongside ship) value, compiled from Department of Commerce, U.S. Exports, Schedule B.

2/ The construction machinery and equipment industry (input-output industry 45.0100) is reviewed in greater detail in this report.

3/ The ball and roller bearings industry (input-output industry 49.0200) is reviewed in greater detail in this report.

Table 8.--Estimated changes in U.S. exports because of the price changes and the exchange rate changes by 2-digit input-output categories.

(In thousands of dollars)

Input-output sector	Industry description	1983 exports			1984 exports		
		Change due to price change 1/ (1)	Change due to exchange rate 2/ (2)	(1) as percent of (2) (3)	Change due to price change 1/ (4)	Change due to exchange rate 2/ (5)	(4) as percent of (5) (6)
1	Livestock and livestock products	-79	-135,101	0.06	-136	-90,822	0.15
2	Other agricultural products	-2,994	-7,651,332	0.04	-6,084	-6,141,338	0.10
3	Forestry and fishery products	-19	-28,439	0.07	-46	-26,440	0.17
4	Agricultural, forestry, and fishery services	0	0	0.00	0	0	0.00
5	Iron and ferroalloy ores mining	-183	-65,726	0.28	-477	-67,035	0.71
6	Nonferrous metal ores mining	-90	-28,935	0.31	-165	-20,751	0.80
7	Coal mining	-1,136	-790,368	0.14	-2,307	-619,205	0.37
8	Crude petroleum and natural gas	-100	-103,255	0.10	-131	-53,450	0.25
9	Stone and clay mining and quarrying	-173	-111,190	0.16	-339	-84,628	0.40
10	Chemical and fertilizer mineral mining	-196	-135,071	0.15	-210	-56,216	0.37
11	New construction	0	0	0.00	0	0	0.00
12	Maintenance and repair construction	0	0	0.00	0	0	0.00
13	Ordnance and accessories	-992	-356,810	0.28	-1,802	-255,031	0.71
14	Food and kindred products	-4,679	-4,299,592	0.11	-9,218	-3,331,979	0.28
15	Tobacco manufactures	-105	-450,748	0.02	-207	-344,211	0.06
16	Broad and narrow fabrics, yarn and thread mills	-73	-192,073	0.04	-134	-137,898	0.10
17	Miscellaneous textile goods and floor coverings	-61	-136,832	0.04	-123	-108,813	0.11
18	Apparel	-74	-267,868	0.03	-137	-195,556	0.07
19	Miscellaneous fabricated textile products	-15	-55,399	0.03	-32	-44,764	0.07
20	Lumber and wood products, except containers	-1,105	-1,220,521	0.09	-2,057	-890,640	0.23
21	Wood containers	-5	-6,454	0.08	-12	-5,662	0.22
22	Household furniture	-115	-47,221	0.24	-221	-35,614	0.62
23	Other furniture and fixtures	-319	-41,275	0.77	-677	-34,649	1.95
24	Paper and allied products, except containers	-1,143	-2,330,790	0.05	-2,370	-1,896,118	0.13
25	Paperboard containers and boxes	0	0	0.00	0	0	0.00
26	Printing and publishing	-219	-728,822	0.03	-441	-576,248	0.08
27	Chemicals and selected chemical products	-3,331	-2,814,206	0.12	-7,762	-2,589,235	0.30
28	Plastics and synthetic materials	-742	-1,093,833	0.07	-1,536	-904,581	0.17
29	Drugs, cleaning and toilet preparations	-691	-761,451	0.09	-1,378	-600,227	0.23
30	Paints and allied products	-110	-59,732	0.18	-212	-45,492	0.47
31	Petroleum refining and related industries	-1,087	-1,210,687	0.09	-2,065	-904,311	0.23
32	Rubber and miscellaneous plastic products	-855	-699,160	0.12	-1,830	-591,785	0.31
33	Leather tanning and finishing	-38	-69,413	0.06	-92	-65,456	0.14
34	Footwear and other leather products	-31	-61,377	0.05	-62	-49,079	0.13
35	Glass and glass products	-41	-88,563	0.05	-85	-72,576	0.12
36	Stone and clay wear	-236	-207,534	0.11	-477	-164,453	0.29
37	Primary iron and steel manufacturing	-4,645	-359,132	1.29	-9,555	-291,908	3.27
38	Primary nonferrous metals manufacturing	-327	-221,051	0.15	-697	-184,873	0.38
39	Metal containers	-367	-19,428	1.89	-734	-15,346	4.78
40	Heating, plumbing, and structural metal products	-504	-35,064	1.44	-941	-25,898	3.64
41	Screw machine products and stampings	-669	-38,544	1.74	-1,416	-32,230	4.39
42	Other fabricated metal products	-3,247	-327,676	0.99	-6,380	-254,427	2.51
43	Engines and turbines	-6,220	-592,036	1.05	-13,123	-492,407	2.67
44	Farm and garden machinery	-2,115	-213,948	0.99	-4,352	-173,537	2.51
45	Construction and mining machinery	-10,686	-876,720	1.22	-20,750	-669,782	3.10
46	Materials handling machinery and equipment	-1,171	-116,442	1.01	-2,253	-88,279	2.55

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Table 8.--Estimated changes in U.S. exports because of the price changes and the exchange rate changes by 2-digit input-output categories--Continued.

(In thousands of dollars)

Input-output sector	Industry description	1983 exports			1984 exports		
		Change due to price change 1/ (1)	Change due to exchange rate 2/ (2)	(1) as percent of (2) (3)	Change due to price change 1/ (4)	Change due to exchange rate 2/ (5)	(4) as percent of (5) (6)
47	Metalworking machinery and equipment	-7,613	-1,158,282	0.66	-15,206	-913,107	1.67
48	Special industry machinery and equipment	-2,099	-304,909	0.69	-3,989	-228,480	1.75
49	General machinery and equipment	-4,607	-506,897	0.91	-9,185	-398,883	2.30
50	Miscellaneous machinery, except electrical	-1,386	-249,433	0.56	-3,564	-253,378	1.41
51	Office, computing, and accounting machines	-13,061	-7,814,804	0.17	-31,388	-7,404,454	0.42
52	Service industries machines	-2,203	-327,796	0.67	-4,083	-239,449	1.71
53	Electric industrial equipment and apparatus	-4,535	-886,107	0.51	-9,275	-715,313	1.30
54	Household appliances	-2,051	-308,174	0.67	-4,319	-256,156	1.69
55	Electric lighting and wiring equipment	-3,061	-614,165	0.50	-6,190	-490,404	1.26
56	Radio, TV, and communication equipment	-2,012	-1,630,223	0.12	-4,277	-1,361,696	0.31
57	Electronic components and accessories	-7,408	-4,721,963	0.16	-17,574	-4,409,414	0.40
58	Misc. electrical machinery and supplies	-5,824	-2,181,736	0.27	-13,361	-1,973,912	0.68
59	Motor vehicles and equipment	-42,984	-4,792,863	0.90	-100,242	-4,411,888	2.27
60	Aircraft and parts	-23,441	-8,621,891	0.27	-42,414	-6,112,790	0.69
61	Other transportation equipment	-6,685	-847,245	0.79	-10,793	-538,927	2.00
62	Scientific and controlling instruments	-4,686	-2,140,368	0.22	-9,484	-1,708,275	0.56
63	Optical, ophthalmic, and photographic equipment	-372	-457,198	0.08	-740	-358,793	0.21
64	Miscellaneous manufacturing	-4,465	-2,118,631	0.21	-13,017	-2,447,722	0.53
65	Transportation and warehousing	0	0	0.00	0	0	0.00
66	Communications, except radio and TV	0	0	0.00	0	0	0.00
67	Radio and TV broadcasting	0	0	0.00	0	0	0.00
68	Electric, gas, water, and sanitary services	0	0	0.00	0	0	0.00
69	Wholesale and retail trade	0	0	0.00	0	0	0.00
70	Finance and insurance	0	0	0.00	0	0	0.00
71	Real estate and rental	0	0	0.00	0	0	0.00
72	Hotels, personal and repair services exc. auto	0	0	0.00	0	0	0.00
73	Business services	0	0	0.00	0	0	0.00
74	Eating and drinking places	0	0	0.00	0	0	0.00
75	Automobile repair and services	0	0	0.00	0	0	0.00
76	Amusements	0	0	0.00	0	0	0.00
77	Medical, educ. services and nonprofit org.	0	0	0.00	0	0	0.00
78	Federal Government enterprises	0	0	0.00	0	0	0.00
79	State and local government enterprises	0	0	0.00	0	0	0.00
	Total	-189,479	-68,732,506	0.28	-402,128	-57,455,993	0.70

1/ Based on "worst case" estimated change in the price of steel because of the EC Arrangement.
2/ Based on actual change in the trade-weighted exchange rate during the period.

Source: Compiled from official statistics of the U.S. Bureau of the Census.

Table 9.--Summary: estimated changes in U.S. exports because of the price changes and the exchange rate changes by 2-digit input-output categories.

(In thousands of dollars)

Industry description	1983 exports			1984 exports		
	Change due to price change 1/ (1)	Change due to exchange rate 2/ (2)	(1) as percent of (2) (3)	Change due to price change 1/ (4)	Change due to exchange rate 2/ (5)	(4) as percent of (5) (6)
Agriculture	-3,092	-7,814,872	0.04	-6,266	-6,258,600	0.10
Manufacturing	-183,422	-58,472,402	0.31	-390,168	-49,391,796	0.79
Mining	-1,778	-1,131,290	0.16	-3,498	-847,835	0.41
Petroleum	-1,187	-1,313,942	0.09	-2,196	-957,761	0.23
Services	0	0	.	0	0	.
Total	-189,479	-68,732,506	0.28	-402,128	-57,455,993	0.70

1/ Based on "worst case" estimated change in the price of steel because of the EC Arrangement.
2/ Based on actual change in the trade-weighted exchange rate during the period.

Source: Compiled from official statistics of the U.S. Bureau of the Census.

Overall, under this "worst case" scenario, the estimated increase in the average price of steel would lower the value of exports in 1983 by $189 million and in 1984 by $402 million. In 1983, the total value of exports was $203 billion and in 1984, the total value of exports was $220 billion. Thus, these reductions are 0.09 percent of the total value of U.S. exports in 1983 and 0.18 percent of the total value of U.S. exports in 1984. These effects are small, particularly in comparison to the estimated effect of the appreciation of the dollar during 1983 and 1984. The effect of the movement in the exchange rate from 1981 to 1983 on U.S. exports in 1983 is presented in column 2 of table 8. The appreciation of the dollar over this time period would have lowered the value of exports in 1983 by $68.7 billion dollars, or by 34 percent. Contrasting column 1 with column 2, it is clear that the exchange rate change overwhelms the "worst case" effect of the increase in the price of steel. The third column in table 8 is the ratio of the effect in column 1 to that in column 2. Entries in column 3 show that the effect of the price increase rarely exceeds 1 percent of the effect of the dollar appreciation. Overall, the decline in total 1983 exports because of the change in the price of steel is 0.28 percent as great as the decline caused by the appreciation of the dollar. The respective percentage for 1984 is 0.70.

In summation, although it appears that the U.S.-EC Arrangement did limit EC steel exports below those projected by the "worst case" scenario, available data indicates that the agreement had no measurable effect on the overall level of U.S. exports during 1983 and 1984. Exports by all U.S. sectors, not only steel-consuming industries, began to stagnate as early as 1980 and 1981 before the EC Arrangement was implemented. They were primarily affected by the onset of the worldwide recession that reduced the demand for U.S. exports and the appreciation of the dollar relative to other major currencies. For instance, although exports of U.S. merchandise rose from $27 billion in 1965 to over $200 billion in each year since 1980, they peaked in 1981 at $224 billion. 1/

1/ U.S. exports as a percent of the gross national product (GNP) peaked even earlier. They doubled from 3.9 percent in 1965 to a high of 8.4 percent in 1980. However, since 1980, although GNP has grown by nearly 40 percent in nominal terms, the value of exports has stagnated. Exports relative to GNP declined to 6.0 percent in 1984, a decline of nearly 29 percent from 1980. Exports of manufactured goods, which in recent years constitute about two-thirds of total U.S. merchandise exports, have also fallen as a percent of GNP. Exports of manufactures were equivalent to 5.5 percent of GNP in 1980, but fell to 3.9 percent in 1984, for a decline of 29 percent. The (f.a.s.)

value of total U.S. exports from the Department of Commerce for 1978 to 1984 and the annual rate of change are the following:

Year	Total exports (f.a.s) (millions of dollars)	Annual change (percent)
1978--------:	135,952	-
1979--------:	174,603	+28.4
1980--------:	212,129	+21.5
1981--------:	223,647	+5.4
1982--------:	200,006	-10.6
1983--------:	202,790	+1.4
1984--------:	220,076	+8.5

U.S. exports fell from $223.6 billion in 1981 to $200 billion in 1982. In 1983, they rose only to $202.8 billion. However, the United States and the rest of the world began to recover from the worldwide recession in 1984, and exports rose by 8.5 percent to $220.1 billion.

The conclusions derived above may not be unexpected since the export limitations of the EC Arrangement were only moderately restrictive. When the limits set by the Arrangement are applied to the actual 1981 EC shares of apparent consumption of the products covered by the agreement, EC exports of these products declined 7.76 percent (see table 10). This decline represents only a 2.98 percent decrease in total imports of products covered by the EC Arrangement and a 1.63 percent decline in imports of total steel mill products. Decreases of this magnitude would have a small effect on the aggregate price of steel.

ASSESSMENT OF THE EFFECTS OF THE PRESIDENT'S PROGRAM ON U.S. EXPORTS

On September 18, 1984, the President directed the United States Trade Representative to negotiate agreements with those countries whose exports of steel had increased significantly in recent years. (See app. H). By August 1985, basic agreements had been reached with the governments of 14 steel-exporting countries limiting their steel exports to a specified share of the U.S. market for the next 5 years beginning October 1, 1984. Coupled with existing agreements, such as the U.S.-EC Steel Arrangement, the President expects the program to achieve "a more normal level of steel imports, or approximately 18.5 percent [of apparent consumption], excluding semifinished steel," as compared to the 26.6 percent share of the U.S. steel market in 1984. This section discusses the origins and presents an overview of the Presidents' steel import restraint program and estimates its effect on the price of steel and the projected level of total exports of U.S. steel-consuming industries from 1985 through September 1989. The methodology employed is similiar to that used in the previous section to determine the effect of the EC Arrangement on U.S. exports. Many of the underlying assumptions embodied in the analysis are presented in this section. A more detailed presentation of the assumptions is given in appendix H.

Table 10.--Reduction in EC steel mill exports as a result of applying export limits set by the EC Arrangement, 1981

Product	Export limit	Actual limit	1981 share	Arrangement level 1/	Difference
	Percent		Short tons		
Hot-rolled sheet and strip	6.81	7.56	1,209,882	1,081,896	-127,986
Cold-rolled sheet	5.11	5.40	833,067	786,027	-47,040
Plate	5.36	5.89	531,039	480,855	-50,184
Structurals	9.91	10.47	709,221	667,122	-42,099
Wire rod	4.29	4.72	172,502	156,230	-16,272
Hot-rolled bar	2.38	2.76	200,252	172,290	-27,962
Coated sheet	3.27	3.15	249,245	2/	2/
Tin plate	2.20	2.16	73,754	2/	2/
Rails	8.90	9.88	111,971	99,740	-12,231
Sheet piling	21.85	21.85	81,499	2/	2/

	Short tons
Total change in 1981 EC exports subject to Arrangement	-323,774
Difference as a share of total--	
EC exports subject to the Arrangement	7.76
Imports subject to the EC Arrangement	2.98
Steel mill imports	1.63

1/ In order to compute the Arrangement level, an adjustment must be made to apparent consumption since it changes with a change in the import quantity. The Arrangement level was computed using the formula, $(s_L/(1-s_L))[AC - M^{ec}]$, where s_L is the legal limit, AC is apparent consumption in 1981, and M^{ec} are actual EC exports of steel mill products subject to the Arrangement in 1981.

2/ The export limit was nonbinding.

Source: Compiled from data in U.S. International Trade Commission, Monthly Report on Selected Steel Industry Data.

Overview of Export Restraint Program

On January 24, 1984, Bethlehem Steel Corp. and the United Steelworkers of America filed a petition with the U.S. International Trade Commission under section 201 of the Trade Act of 1974, requesting temporary relief from import competition for a wide range of carbon and certain alloy steel products. 1/ Section 201 requires the Commission to determine whether an article is being imported in such increased quantities as to be a substantial cause of serious injury or threat to the domestic industry and, if so, to recommend the relief that would prevent or remedy the injury. In July 1984, the Commission made an affirmative determination with respect to five of nine product areas covered in the investigation representing approximately 70 percent of total industry shipments.

To prevent or remedy the injury, the Commission majority recommended that the President--

> impose (1) a tariff-rate quota on imports of semifinished steel, (2) quantitative restrictions (quotas) on imports of plates, sheets and strip, structurals and wire, and (3) a tariff increase on imports of wire products....for a period of five years with specified reductions in the level of relief in the fourth and fifth years. . . .We believe that this period is necessary for the domestic industries to generate additional income, make investments in modernizing facilities, and thus adjust to import competition. The size of the investment required for modernization of facilities and the time necessary for items such as continuous casters to become operational would make a shorter period of relief ineffective. 2/

On September 18, 1984, the President determined under section 203 of the Trade Act of 1984 that he would not implement the Commission's remedy recommendation because "import relief is not in the national economic interest." In lieu of imposing the relief recommended by the Commission, the President outlined a nine-point program designed to assist the domestic steel industry in competing with imports. 3/ Under this program, the U.S. Government would negotiate surge-control arrangements (and self-initiate unfair trade petitions if necessary), with understandings or suspension agreements with countries "whose exports have increased significantly in recent years due to an unfair trade in imports." Unfair surges were described in the President's decision as dumping, subsidization, or diversion from other importing countries that have restricted access to their markets.

1/ Such products were carbon and alloy steel ingots, blooms, billets, slabs, and sheet bars; plates; sheets and strip; wire rods; wire and wire products; railway-type products; bars; structural shapes and units; and pipes and tubes and blanks.

2/ See "Views of Commissioners Eckes, Lodwick, and Rohr regarding remedy," in Carbon Steel and Certain Alloy Steel Products, USITC Publication 1553, July 1984, pp. 71-79.

3/ See app. E.

The aim of these measures is to limit imports of finished steel mill products to 18.5 percent of the domestic market, and semifinished steel imports to about 1.7 million tons annually. 1/ The surge-control Arrangements apply to steel products exported to the United States for a 5-year period beginning October 1, 1984. 2/ The Arrangements are administered through a system like that of the U.S.-EC Arrangement. Under the terms of the Arrangements, the Department of Commerce was obliged to withdraw antidumping or countervailing duty orders, and petitioners were obliged to withdraw petitions and agree to undertake not to file new unfair trade petitions on finished steel products. The following tabulation shows the countries with whom Arrangements have been reached and the 1985 initial period overall import penetration limits that have been negotiated on either a market share or tonnage basis: 3/

Country	1985 Arrangement level	
Japan	5.80	percent
Republic of Korea	1.90	percent
Brazil	0.80	percent
Spain	0.67	percent
South Africa	0.42	percent
Mexico	0.36	percent
Finland	0.224	percent
Australia	0.18	percent
Czechoslovakia	50,000	tons
Romania	360,000	tons
Poland	112,500	tons
Hungary	42,500	tons
Venezuela	466,300	tons
East Germany	150,000	tons

1/ Statement of Robert Lighthizer, Deputy U.S. Trade Representative before the Subcommittee on Energy and Investigations, Committee on Energy and Commerce, U.S. House of Representatives, Mar. 19, 1985.

2/ The 1985 "initial period" covers Oct. 1, 1984, through Dec. 31, 1985. Levels for 1986, 1987, and 1988 are on a calendar bases. The 1989 "end period" covers Jan. 1, 1989, through Sept. 30, 1989.

3/ See app. I for import restraint levels by country, product, and period.

The United States Trade Representative has initiated efforts to implement the President's steel program with respect to semifinished steel products and has negotiated a series of restraint arrangements with U.S. trading partners to restrict imports of these products . The following tabulation shows the countries with whom arrangements have been concluded and allotment levels for the 1985 initial period: 1/

Country	1985 export ceiling (short tons)
Finland	21,000
Brazil	875,000
Japan	125,000
Mexico	125,000
South Africa	125,000
Republic of Korea	62,500
Spain	62,500
Australia	50,000
Venezuela	60,000
Total	1,506,000

Estimate of the effect of the export restraint program on exports of steel-consuming industries 2/

To determine the effect of the President's import restraint program on the supply of steel mill imports, and, in turn, on the price of steel in the United States, it is first necessary to forecast the future level of total and semifinished steel imports in the absence of any restraints. This was done as follows. The 1985 level of apparent consumption was obtained by annualizing the first two quarters of 1985. The successive years were then obtained by increasing the 1985 level at a 1.45 percent annual (exponential) rate of growth. 3/ Forecasts of semifinished steel imports were derived from a recent Commission investigation that gathered information from consumers of semifinished steel. 4/ In that study, imports of semifinished steel products were forecast to be between 1.7 and 3.1 million short tons by 1988. The projection used in this study was derived by taking the average of this

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1/ Allotments for semifinished steel imports were obtained from an article appearing in American Metal Market, Dec. 27, 1984, and from the Department of Commerce.

2/ A detailed discussion of the assumptions and methodology underlying this section can be found in appendixes D through F.

3/ This rate of growth would result in a level of 105 million short tons per year by 1989, a value consistent with three independent projections. The three forecasts can be found in the U.S. Department of Commerce, 1985 U.S. Industrial Outlook, Prospects for over 350 Industries; Data Resources, Steel Industry Review, Second Quarter 1985; and Donald F. Barnett and Louis Schorsch, Steel: Upheaval in a Basic Industry (Cambridge, Mass.: Ballinger Publishing Co., 1983).

4/ The Effects of Semifinished Steel Imports on the U.S. Iron and Steel Scrap Industry, USITC Publication 1682, May 1985.

estimate for 1988 and then deriving the annual rate of growth from 1984 to 1988. The import share of apparent consumption of steel mill products was assumed to remain constant at the 1984 level of 26.6 percent.

On the basis of the assumptions outlined above, the restrictions proposed by the President would reduce total U.S. imports of steel mill products annually by approximately 30 percent. Since the 18.5 percent restriction does not apply to semifinished steel imports, these imports were removed before calculating the permissible volume of restricted imports. The permissible level of semifinished imports, 1.7 million short tons, is then added to this quantity to obtain the total level of steel mill imports under the restraint program. 1/ The declines in import supply are listed in table 11.

Applying the formulas in appendix H, the declines in import supply would raise the weighted-average price of steel in each year of the restraint by (approximately) 2.9 percent. The estimated effect of the President's steel import restraint program on the weighted-average price of steel in the United States during 1985-89 is shown in table 12. The effects of this price increase on U.S. exports is presented in tables 13 through 16.

Table 13 presents the projected levels of exports for each input-output industry from 1985 through 1989 in the absence of an import restraint program. Total exports are estimated to rise from a level of $234 billion in 1985 to $294 billion by September 1989. Alternatively, table 14 indicates the level of exports that would exist in the presence of the President's steel import restraint program. Under the import restraint program, U.S. exports are estimated to rise from a level of $233 billion in 1985 to $274 billion in 1988, reaching $288 billion by September 1989.

Table 15 lists for each input-output industry the change in exports and table 16 translates that change into the percentage by which exports have fallen due to the import restraint program. As indicated in table 15, in terms of value, total exports are reduced in the first year by $903 million and the difference rises to $5,627 million by July-September 1989. In percentage terms (see table 16), the import restraint program has the effect of lowering total exports 0.59 percent in 1985 and by 1.32 percent by the third quarter of 1989.

1/ See table 11, footnote 1 for an algebraic derivation of the level of imports under the restraint program.

Table 11.--Projected increase 1/ in apparent consumption of steel mill products, total imports, and imports of semifinished steel, and the percentage change in total steel mill imports due to the President's steel import restraint program, 1985-89

Year	Projected total steel mill exports to the United States					
	Without restraints			Limits		Change in total imports
	Apparent consumption	Total imports	Semifinished imports	Total imports	Semi-finished	
	1,000 short tons					-Percent-
1984 2/-	98,923	26,164	1,515	-	-	-
1985----	99,086	26,208	1,700	18,243	1,700	-30.4
1986----	100,533	26,591	1,907	18,484	1,700	-30.5
1987----	102,000	26,979	2,139	18,729	1,700	-30.6
1988----	103,489	27,373	2,400	18,978	1,700	-30.7
1989----	105,000	27,773	2,693	19,230	1,700	-30.8

1/ The import supply under the restrictions (M_p) is estimated by subtracting the difference between total projected imports (M_t) from the projected level of apparent consumption (AC) and then multiplying by 0.185 (or multiplying by 0.185/(1-0.185) since apparent consumption is altered by the restriction.) The permissible level of semifinished imports, 1.7 million short tons, are then added to this quantity to obtain the total level of steel mill imports under the restraint program. These calculations in algebraic form are as follows:

$$M_p = (s_p/1-s_p)[AC - M_t] + 1,700$$

where s_p is the 0.185 share of apparent consumption set by the President's steel import restraint program.

2/ 1984 data are actual values.

Source: Compiled from data in the U.S. International Trade Commission's Monthly Report on Selected Steel Industry Data, various issues.

Table 12.--Estimated effect of the President's Restraint Program on the weighted-average price of steel in the United States, 1983 and 1984

Year	Percentage change in--		
	Domestic price	Import price	Weighted-average price
1985----------	1.06	8.89	2.84
1986----------	1.06	8.92	2.84
1987----------	1.07	8.96	2.86
1988----------	1.07	8.99	2.87
1989----------	1.07	9.02	2.88

Source: Compiled by USITC staff.

Table 13.--Projected 1/ from 1985 to September 1989 level of exports, by 2-digit input-output categories, in the absence of steel import restraint program.

(In thousands of dollars)

Input-output sector	Industry description	Projected exports				
		1985	1986	1987	1988	1989 2/
1	Livestock and livestock products	419,148	444,297	470,955	499,212	527,010
2	Other agricultural products	28,478,844	30,187,575	31,998,829	33,918,759	35,807,484
3	Forestry and fishery products	212,525	225,277	238,793	253,121	267,216
4	Agricultural, forestry, and fishery services	0	0	0	0	0
5	Iron and ferroalloy ores mining	534,368	566,431	600,416	636,441	671,881
6	Nonferrous metal ores mining	165,413	175,338	185,858	197,010	207,980
7	Coal mining	4,935,962	5,232,120	5,546,047	5,878,810	6,206,165
8	Crude petroleum and natural gas	426,073	451,637	478,735	507,459	535,717
9	Stone and clay mining and quarrying	674,608	715,034	757,989	803,468	848,209
10	Chemical and fertilizer mineral mining	448,125	475,013	503,513	533,724	563,444
11	New construction	0	0	0	0	0
12	Maintenance and repair construction	0	0	0	0	0
13	Ordnance and accessories	2,049,905	2,172,899	2,303,273	2,441,470	2,577,420
14	Food and kindred products	12,266,586	13,002,582	13,782,737	14,609,701	15,423,224
15	Tobacco manufactures	1,267,204	1,343,236	1,423,830	1,509,260	1,593,302
16	Broad and narrow fabrics, yarn and thread mills	1,023,145	1,084,533	1,149,605	1,218,582	1,286,437
17	Miscellaneous textile goods and floor coverings	807,349	855,790	907,137	961,566	1,015,109
18	Apparel	943,111	999,698	1,059,679	1,123,260	1,185,808
19	Miscellaneous fabricated textile products	332,130	352,058	373,182	395,572	417,599
20	Lumber and wood products, except containers	5,238,190	5,552,482	5,885,631	6,238,769	6,586,167
21	Wood containers	39,006	41,346	43,827	46,457	49,044
22	Household furniture	343,514	364,125	385,972	409,131	431,912
23	Other furniture and fixtures	334,208	354,261	375,516	398,047	420,212
24	Paper and allied products, except containers	4,851,172	5,142,242	5,450,777	5,777,823	6,099,554
25	Paperboard containers and boxes	0	0	0	0	0
26	Printing and publishing	1,474,316	1,562,775	1,656,541	1,755,934	1,853,711
27	Chemicals and selected chemical products	15,135,966	16,044,124	17,006,772	18,027,178	19,031,000
28	Plastics and synthetic materials	4,716,266	4,999,242	5,299,197	5,617,149	5,929,933
29	Drugs, cleaning and toilet preparations	3,508,768	3,719,294	3,942,451	4,178,998	4,411,701
30	Paints and allied products	237,184	251,415	266,499	282,489	298,219
31	Petroleum refining and related industries	5,286,359	5,603,541	5,939,753	6,296,138	6,646,731
32	Rubber and miscellaneous plastic products	3,085,422	3,270,548	3,466,780	3,674,787	3,879,413
33	Leather tanning and finishing	341,273	361,750	383,455	406,462	429,095
34	Footwear and other leather products	255,887	271,240	287,514	304,765	321,736
35	Glass and glass products	875,040	927,542	983,195	1,042,186	1,100,219
36	Stone and clay wear	1,057,484	1,120,933	1,188,189	1,259,480	1,329,613
37	Primary iron and steel manufacturing	2,406,487	2,550,876	2,703,929	2,866,164	3,025,763
38	Primary nonferrous metals manufacturing	5,943,959	6,300,597	6,678,633	7,079,351	7,473,556
39	Metal containers	148,020	156,901	166,315	176,294	186,111
40	Heating, plumbing, and structural metal product	1,248,978	1,323,916	1,403,351	1,487,552	1,570,385
41	Screw machine products and stampings	310,869	329,522	349,293	370,250	390,867
42	Other fabricated metal products	1,845,161	1,955,871	2,073,223	2,197,617	2,319,988
43	Engines and turbines	4,523,326	4,794,725	5,082,409	5,387,353	5,687,341
44	Farm and garden machinery	1,594,134	1,689,782	1,791,169	1,898,640	2,004,363
45	Construction and mining machinery	6,152,713	6,521,876	6,913,189	7,327,980	7,736,030
46	Materials handling machinery and equipment	810,940	859,596	911,172	965,842	1,019,624
47	Metalworking machinery and equipment	2,752,292	2,917,430	3,092,476	3,278,024	3,460,557
48	Special industry machinery and equipment	2,098,854	2,224,785	2,358,272	2,499,768	2,638,965
49	General machinery and equipment	3,664,195	3,884,047	4,117,090	4,364,115	4,607,126
50	Miscellaneous machinery, except electrical	2,327,572	2,467,226	2,615,260	2,772,175	2,926,540

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Table 13.--Projected 1/ from 1985 to September 1989 level of exports, by 2-digit input-output categories, in the absence of steel import restraint program--Continued.

(In thousands of dollars)

Input-output sector	Industry description	Projected exports				
		1985	1986	1987	1988	1989 2/
51	Office, computing, and accounting machines	16,121,743	17,089,047	18,114,390	19,201,254	20,270,453
52	Service industries machines	2,199,609	2,331,586	2,471,481	2,619,770	2,765,649
53	Electric industrial equipment and apparatus	3,942,582	4,179,137	4,429,886	4,695,679	4,957,152
54	Household appliances	1,235,370	1,309,492	1,388,062	1,471,346	1,553,276
55	Electric lighting and wiring equipment	1,126,232	1,193,805	1,265,434	1,341,360	1,416,052
56	Radio, TV, and communication equipment	6,567,088	6,961,113	7,378,780	7,821,507	8,257,038
57	Electronic components and accessories	7,847,011	8,317,832	8,816,902	9,345,916	9,866,332
58	Misc. electrical machinery and supplies	3,512,783	3,723,550	3,946,963	4,183,781	4,416,749
59	Motor vehicles and equipment	17,731,111	18,794,977	19,922,676	21,118,036	22,293,969
60	Aircraft and parts	15,639,427	16,577,793	17,572,460	18,626,808	19,664,019
61	Other transportation equipment	2,269,956	2,406,153	2,550,523	2,703,554	2,854,098
62	Scientific and controlling instruments	5,927,011	6,282,632	6,659,589	7,059,165	7,452,246
63	Optical, ophthalmic, and photographic equipment	2,471,946	2,620,262	2,777,478	2,944,127	3,108,067
64	Miscellaneous manufacturing	8,431,926	8,937,842	9,474,112	10,042,559	10,601,767
65	Transportation and warehousing	0	0	0	0	0
66	Communications, except radio and TV	0	0	0	0	0
67	Radio and TV broadcasting	0	0	0	0	0
68	Electric, gas, water, and sanitary services	0	0	0	0	0
69	Wholesale and retail trade	35,509	37,640	39,898	42,292	44,647
70	Finance and insurance	0	0	0	0	0
71	Real estate and rental	0	0	0	0	0
72	Hotels, personal and repair services exc. auto	542,046	574,568	609,042	645,585	681,534
73	Business services	0	0	0	0	0
74	Eating and drinking places	0	0	0	0	0
75	Automobile repair and services	0	0	0	0	0
76	Amusements	67,782	71,848	76,159	80,729	85,224
77	Medical, educ. services and nonprofit org.	200,816	212,865	225,637	239,175	252,493
78	Federal Government enterprises	122,760	130,126	137,933	146,209	154,351
79	State and local government enterprises	0	0	0	0	0
	Total	233,584,759	247,599,845	262,455,835	278,203,186	293,694,596

1/ Based on U.S. Department of Commerce assumption of an 6 percent annual rate of growth through September 1989.
2/ January through September 1989.

Source: Compiled from official statistics of the U.S. Bureau of the Census.

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Table 14.--Projected from 1985 through September 1989 level of exports, by 2-digit input-output categories, in the presence of steel import restraint program.

(In thousands of dollars)

Input-output sector	Industry description	Projected exports				
		1985	1986	1987	1988	1989 1/
1	Livestock and livestock products	418,842	443,649	469,923	497,751	525,079
2	Other agricultural products	28,465,184	30,158,622	31,952,697	33,853,441	35,721,145
3	Forestry and fishery products	212,423	225,060	238,448	252,631	266,568
4	Agricultural, forestry, and fishery services	0	0	0	0	0
5	Iron and ferroalloy ores mining	533,297	564,160	596,802	631,328	665,127
6	Nonferrous metal ores mining	165,042	174,552	184,607	195,240	205,643
7	Coal mining	4,930,783	5,221,146	5,528,566	5,854,066	6,173,467
8	Crude petroleum and natural gas	425,778	451,013	477,741	506,052	533,857
9	Stone and clay mining and quarrying	673,847	713,472	755,422	799,834	843,407
10	Chemical and fertilizer mineral mining	447,654	474,015	501,924	531,474	560,470
11	New construction	0	0	0	0	0
12	Maintenance and repair construction	0	0	0	0	0
13	Ordnance and accessories	2,045,860	2,164,333	2,289,634	2,422,172	2,551,931
14	Food and kindred products	12,245,889	12,958,740	13,712,924	14,510,914	15,292,726
15	Tobacco manufactures	1,266,738	1,342,249	1,422,257	1,507,032	1,590,357
16	Broad and narrow fabrics, yarn and thread mills	1,022,843	1,083,894	1,148,586	1,217,138	1,284,529
17	Miscellaneous textile goods and floor coverings	807,074	855,207	906,208	960,250	1,013,370
18	Apparel	942,804	999,047	1,058,643	1,121,792	1,183,867
19	Miscellaneous fabricated textile products	332,059	351,908	372,942	395,233	417,151
20	Lumber and wood products, except containers	5,233,571	5,542,693	5,870,036	6,216,693	6,556,993
21	Wood containers	38,979	41,288	43,735	46,326	48,870
22	Household furniture	343,019	363,075	384,301	406,766	428,788
23	Other furniture and fixtures	332,688	351,045	370,402	390,821	410,680
24	Paper and allied products, except containers	4,845,850	5,130,966	5,432,815	5,752,400	6,065,959
25	Paperboard containers and boxes	0	0	0	0	0
26	Printing and publishing	1,473,326	1,560,677	1,653,199	1,751,202	1,847,456
27	Chemicals and selected chemical products	15,118,537	16,007,196	16,947,953	17,943,925	18,920,991
28	Plastics and synthetic materials	4,712,817	4,991,932	5,287,551	5,600,661	5,908,142
29	Drugs, cleaning and toilet preparations	3,505,674	3,712,739	3,932,009	4,164,216	4,392,165
30	Paints and allied products	236,707	250,405	264,892	280,215	295,216
31	Petroleum refining and related industries	5,281,722	5,593,715	5,924,100	6,273,980	6,617,448
32	Rubber and miscellaneous plastic products	3,081,313	3,261,842	3,452,916	3,655,165	3,853,487
33	Leather tanning and finishing	341,067	361,313	382,758	405,476	427,792
34	Footwear and other leather products	255,748	270,946	287,046	304,102	320,859
35	Glass and glass products	874,848	927,136	982,548	1,041,270	1,099,008
36	Stone and clay wear	1,056,412	1,118,662	1,184,572	1,254,360	1,322,847
37	Primary iron and steel manufacturing	2,385,031	2,505,594	2,632,083	2,764,871	2,892,440
38	Primary nonferrous metals manufacturing	5,942,394	6,297,279	6,673,346	7,071,864	7,463,659
39	Metal containers	146,372	153,427	160,810	168,541	175,918
40	Heating, plumbing, and structural metal product	1,246,864	1,319,439	1,396,221	1,477,463	1,557,057
41	Screw machine products and stampings	307,691	322,818	338,664	355,274	371,169
42	Other fabricated metal products	1,830,836	1,925,619	2,025,198	2,129,868	2,230,765
43	Engines and turbines	4,493,860	4,732,462	4,983,502	5,247,738	5,503,356
44	Farm and garden machinery	1,584,363	1,669,130	1,758,356	1,852,311	1,943,300
45	Construction and mining machinery	6,106,123	6,423,479	6,756,966	7,107,576	7,445,735
46	Materials handling machinery and equipment	805,881	848,906	894,188	941,865	988,022
47	Metalworking machinery and equipment	2,718,150	2,845,496	2,978,545	3,117,678	3,249,878
48	Special industry machinery and equipment	2,089,896	2,205,836	2,328,137	2,457,182	2,582,781
49	General machinery and equipment	3,643,571	3,840,447	4,047,799	4,266,261	4,478,115
50	Miscellaneous machinery, except electrical	2,319,568	2,450,288	2,588,311	2,734,076	2,876,255

Table 14.--Projected from 1985 through September 1989 level of exports, by 2-digit input-output categories, in the presence of steel import restraint program--Continued.

(In thousands of dollars)

Input-output sector	Industry description	Projected exports				
		1985	1986	1987	1988	1989 1/
51	Office, computing, and accounting machines	16,051,267	16,939,965	17,877,315	18,866,239	19,828,491
52	Service industries machines	2,190,442	2,312,192	2,440,636	2,576,178	2,708,135
53	Electric industrial equipment and apparatus	3,921,756	4,135,102	4,359,892	4,596,815	4,826,788
54	Household appliances	1,225,672	1,289,013	1,355,551	1,425,485	1,492,881
55	Electric lighting and wiring equipment	1,112,333	1,164,522	1,219,053	1,276,081	1,330,280
56	Radio, TV, and communication equipment	6,557,486	6,940,771	7,346,384	7,775,660	8,196,467
57	Electronic components and accessories	7,807,551	8,234,388	8,684,250	9,158,526	9,619,203
58	Misc. electrical machinery and supplies	3,482,783	3,660,221	3,846,466	4,042,066	4,230,188
59	Motor vehicles and equipment	17,506,034	18,320,844	19,171,843	20,061,462	20,905,937
60	Aircraft and parts	15,544,193	16,376,510	17,252,650	18,175,272	19,068,855
61	Other transportation equipment	2,245,723	2,355,054	2,469,519	2,589,450	2,704,047
62	Scientific and controlling instruments	5,905,715	6,237,566	6,587,896	6,957,814	7,318,488
63	Optical, ophthalmic, and photographic equipment	2,470,283	2,616,740	2,771,866	2,936,181	3,097,565
64	Miscellaneous manufacturing	8,402,699	8,875,988	9,375,705	9,903,435	10,418,147
65	Transportation and warehousing	0	0	0	0	0
66	Communications, except radio and TV	0	0	0	0	0
67	Radio and TV broadcasting	0	0	0	0	0
68	Electric, gas, water, and sanitary services	0	0	0	0	0
69	Wholesale and retail trade	35,509	37,640	39,898	42,292	44,647
70	Finance and insurance	0	0	0	0	0
71	Real estate and rental	0	0	0	0	0
72	Hotels, personal and repair services exc. auto	542,046	574,568	609,042	645,585	681,534
73	Business services	0	0	0	0	0
74	Eating and drinking places	0	0	0	0	0
75	Automobile repair and services	0	0	0	0	0
76	Amusements	67,782	71,848	76,159	80,729	85,224
77	Medical, educ. services and nonprofit org.	200,816	212,865	225,637	239,175	252,493
78	Federal Government enterprises	122,760	130,126	137,933	146,209	154,351
79	State and local government enterprises	0	0	0	0	0
	Total	232,681,847	245,692,838	259,427,979	273,931,152	288,067,564

1/ January through September 1989.

Source: Compiled from official statistics of the U.S. Bureau of the Census.

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Table 15--Change from 1985 to September 1989 projected level of exports, 2-digit input-output categories, based on estimated changes in the price of steel because of import restraint program.

Input-output sector	Industry description	Estimated change in exports				
		1985	1986	1987	1988	1989 1/
1	Livestock and livestock products	-306	-648	-1,032	-1,461	-1,932
2	Other agricultural products	-13,660	-28,953	-46,132	-65,318	-86,393
3	Forestry and fishery products	-102	-217	-346	-490	-648
4	Agricultural, forestry, and fishery services	0	0	0	0	0
5	Iron and ferroalloy ores mining	-1,072	-2,270	-3,614	-5,114	-6,755
6	Nonferrous metal ores mining	-371	-786	-1,251	-1,770	-2,337
7	Coal mining	-5,179	-10,974	-17,481	-24,744	-32,707
8	Crude petroleum and natural gas	-294	-624	-994	-1,407	-1,861
9	Stone and clay mining and quarrying	-761	-1,612	-2,567	-3,634	-4,803
10	Chemical and fertilizer mineral mining	-471	-998	-1,590	-2,250	-2,975
11	New construction	0	0	0	0	0
12	Maintenance and repair construction	0	0	0	0	0
13	Ordnance and accessories	-4,045	-8,567	-13,640	-19,298	-25,493
14	Food and kindred products	-20,697	-43,842	-69,812	-98,786	-130,522
15	Tobacco manufactures	-466	-987	-1,573	-2,228	-2,947
16	Broad and narrow fabrics, yarn and thread mills	-302	-640	-1,019	-1,443	-1,910
17	Miscellaneous textile goods and floor coverings	-275	-583	-929	-1,316	-1,741
18	Apparel	-307	-651	-1,037	-1,468	-1,942
19	Miscellaneous fabricated textile products	-71	-150	-240	-339	-449
20	Lumber and wood products, except containers	-4,620	-9,789	-15,595	-22,076	-29,184
21	Wood containers	-27	-58	-93	-131	-173
22	Household furniture	-495	-1,049	-1,671	-2,365	-3,125
23	Other furniture and fixtures	-1,520	-3,216	-5,114	-7,226	-9,532
24	Paper and allied products, except containers	-5,322	-11,276	-17,962	-25,424	-33,604
25	Paperboard containers and boxes	0	0	0	0	0
26	Printing and publishing	-990	-2,098	-3,343	-4,732	-6,258
27	Chemicals and selected chemical products	-17,429	-36,928	-58,819	-83,253	-110,037
28	Plastics and synthetic materials	-3,449	-7,310	-11,646	-16,487	-21,800
29	Drugs, cleaning and toilet preparations	-3,093	-6,555	-10,442	-14,782	-19,542
30	Paints and allied products	-477	-1,010	-1,607	-2,274	-3,004
31	Petroleum refining and related industries	-4,637	-9,826	-15,653	-22,158	-29,294
32	Rubber and miscellaneous plastic products	-4,109	-8,705	-13,865	-19,622	-25,932
33	Leather tanning and finishing	-206	-437	-697	-986	-1,304
34	Footwear and other leather products	-139	-294	-468	-663	-877
35	Glass and glass products	-192	-406	-647	-916	-1,213
36	Stone and clay wear	-1,072	-2,271	-3,617	-5,120	-6,768
37	Primary iron and steel manufacturing	-21,455	-45,282	-71,845	-101,293	-133,327
38	Primary nonferrous metals manufacturing	-1,565	-3,318	-5,287	-7,487	-9,908
39	Metal containers	-1,648	-3,473	-5,505	-7,753	-10,193
40	Heating, plumbing, and structural metal product	-2,114	-4,477	-7,130	-10,089	-13,330
41	Screw machine products and stampings	-3,178	-6,704	-10,629	-14,976	-19,699
42	Other fabricated metal products	-14,325	-30,252	-48,025	-67,749	-89,227
43	Engines and turbines	-29,465	-62,263	-98,906	-139,615	-183,993
44	Farm and garden machinery	-9,772	-20,653	-32,814	-46,328	-61,066
45	Construction and mining machinery	-46,590	-98,397	-156,223	-220,404	-290,305
46	Materials handling machinery and equipment	-5,058	-10,690	-16,984	-23,977	-31,603
47	Metalworking machinery and equipment	-34,143	-71,934	-113,930	-160,346	-210,683
48	Special industry machinery and equipment	-8,957	-18,949	-30,135	-42,586	-56,187
49	General machinery and equipment	-20,624	-43,600	-69,291	-97,854	-129,017
50	Miscellaneous machinery, except electrical	-8,003	-16,938	-26,948	-38,099	-50,289

Table 15--Change from 1985 to September 1989 projected level of exports, 2-digit input-output categories, based on estimated changes in the price of steel because of import restraint program--Continued.

Input-output sector	Industry description	Estimated change in exports				
		1985	1986	1987	1988	1989 1/
51	Office, computing, and accounting machines	-70,476	-149,082	-237,076	-335,014	-441,990
52	Service industries machines	-9,167	-19,394	-30,845	-43,592	-57,517
53	Electric industrial equipment and apparatus	-20,826	-44,035	-69,994	-98,864	-130,371
54	Household appliances	-9,698	-20,480	-32,510	-45,860	-60,396
55	Electric lighting and wiring equipment	-13,899	-29,283	-46,381	-65,278	-85,774
56	Radio, TV, and communication equipment	-9,602	-20,342	-32,396	-45,847	-60,584
57	Electronic components and accessories	-39,460	-83,444	-132,652	-187,390	-247,142
58	Misc. electrical machinery and supplies	-30,000	-63,329	-100,496	-141,715	-186,568
59	Motor vehicles and equipment	-225,076	-474,133	-750,833	-1056574	-1388059
60	Aircraft and parts	-95,234	-201,282	-319,810	-451,536	-595,191
61	Other transportation equipment	-24,233	-51,100	-81,003	-114,104	-150,055
62	Scientific and controlling instruments	-21,296	-45,066	-71,693	-101,351	-133,768
63	Optical, ophthalmic, and photographic equipment	-1,662	-3,523	-5,612	-7,945	-10,506
64	Miscellaneous manufacturing	-29,227	-61,854	-98,407	-139,123	-183,635
65	Transportation and warehousing	0	0	0	0	0
66	Communications, except radio and TV	0	0	0	0	0
67	Radio and TV broadcasting	0	0	0	0	0
68	Electric, gas, water, and sanitary services	0	0	0	0	0
69	Wholesale and retail trade	0	0	0	0	0
70	Finance and insurance	0	0	0	0	0
71	Real estate and rental	0	0	0	0	0
72	Hotels, personal and repair services exc. auto	0	0	0	0	0
73	Business services	0	0	0	0	0
74	Eating and drinking places	0	0	0	0	0
75	Automobile repair and services	0	0	0	0	0
76	Amusements	0	0	0	0	0
77	Medical, educ. services and nonprofit org.	0	0	0	0	0
78	Federal Government enterprises	0	0	0	0	0
79	State and local government enterprises	0	0	0	0	0
	Total	-902,912	-1,907,007	-3,027,856	-4,272,033	-5,627,448

1/ January through September of 1989.

Source: Compiled from official statistics of the U.S. Bureau of the Census.

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Table 16.--Percentage change from 1985 to September 1989 projected level of exports, 2-digit input-output categories, based on estimated changes in the price of steel because of import restraint program

Input-output sector	Industry description	Estimated percentage change in exports				
		1985	1986	1987	1988	1989 1/
1	Livestock and livestock products	-0.07	-0.15	-0.22	-0.29	-0.37
2	Other agricultural products	-0.05	-0.10	-0.14	-0.19	-0.24
3	Forestry and fishery products	-0.05	-0.10	-0.14	-0.19	-0.24
4	Agricultural, forestry, and fishery services	0.00	0.00	0.00	0.00	0.00
5	Iron and ferroalloy ores mining	-0.20	-0.40	-0.60	-0.80	-1.01
6	Nonferrous metal ores mining	-0.22	-0.45	-0.67	-0.90	-1.12
7	Coal mining	-0.10	-0.21	-0.32	-0.42	-0.53
8	Crude petroleum and natural gas	-0.07	-0.14	-0.21	-0.28	-0.35
9	Stone and clay mining and quarrying	-0.11	-0.23	-0.34	-0.45	-0.57
10	Chemical and fertilizer mineral mining	-0.11	-0.21	-0.32	-0.42	-0.53
11	New construction	0.00	0.00	0.00	0.00	0.00
12	Maintenance and repair construction	0.00	0.00	0.00	0.00	0.00
13	Ordnance and accessories	-0.20	-0.39	-0.59	-0.79	-0.99
14	Food and kindred products	-0.17	-0.34	-0.51	-0.68	-0.85
15	Tobacco manufactures	-0.04	-0.07	-0.11	-0.15	-0.18
16	Broad and narrow fabrics, yarn and thread mills	-0.03	-0.06	-0.09	-0.12	-0.15
17	Miscellaneous textile goods and floor coverings	-0.03	-0.07	-0.10	-0.14	-0.17
18	Apparel	-0.03	-0.07	-0.10	-0.13	-0.16
19	Miscellaneous fabricated textile products	-0.02	-0.04	-0.06	-0.09	-0.11
20	Lumber and wood products, except containers	-0.09	-0.18	-0.26	-0.35	-0.44
21	Wood containers	-0.07	-0.14	-0.21	-0.28	-0.35
22	Household furniture	-0.14	-0.29	-0.43	-0.58	-0.72
23	Other furniture and fixtures	-0.45	-0.91	-1.36	-1.82	-2.27
24	Paper and allied products, except containers	-0.11	-0.22	-0.33	-0.44	-0.55
25	Paperboard containers and boxes	0.00	0.00	0.00	0.00	0.00
26	Printing and publishing	-0.07	-0.13	-0.20	-0.27	-0.34
27	Chemicals and selected chemical products	-0.12	-0.23	-0.35	-0.46	-0.58
28	Plastics and synthetic materials	-0.07	-0.15	-0.22	-0.29	-0.37
29	Drugs, cleaning and toilet preparations	-0.09	-0.18	-0.26	-0.35	-0.44
30	Paints and allied products	-0.20	-0.40	-0.60	-0.81	-1.01
31	Petroleum refining and related industries	-0.09	-0.18	-0.26	-0.35	-0.44
32	Rubber and miscellaneous plastic products	-0.13	-0.27	-0.40	-0.53	-0.67
33	Leather tanning and finishing	-0.06	-0.12	-0.18	-0.24	-0.30
34	Footwear and other leather products	-0.05	-0.11	-0.16	-0.22	-0.27
35	Glass and glass products	-0.02	-0.04	-0.07	-0.09	-0.11
36	Stone and clay wear	-0.10	-0.20	-0.30	-0.41	-0.51
37	Primary iron and steel manufacturing	-0.89	-1.78	-2.66	-3.53	-4.41
38	Primary nonferrous metals manufacturing	-0.03	-0.05	-0.08	-0.11	-0.13
39	Metal containers	-1.11	-2.21	-3.31	-4.40	-5.48
40	Heating, plumbing, and structural metal product	-0.17	-0.34	-0.51	-0.68	-0.85
41	Screw machine products and stampings	-1.02	-2.03	-3.04	-4.04	-5.04
42	Other fabricated metal products	-0.78	-1.55	-2.32	-3.08	-3.85
43	Engines and turbines	-0.65	-1.30	-1.95	-2.59	-3.24
44	Farm and garden machinery	-0.61	-1.22	-1.83	-2.44	-3.05
45	Construction and mining machinery	-0.76	-1.51	-2.26	-3.01	-3.75
46	Materials handling machinery and equipment	-0.62	-1.24	-1.86	-2.48	-3.10
47	Metalworking machinery and equipment	-1.24	-2.47	-3.68	-4.89	-6.09
48	Special industry machinery and equipment	-0.43	-0.85	-1.28	-1.70	-2.13
49	General machinery and equipment	-0.56	-1.12	-1.68	-2.24	-2.80
50	Miscellaneous machinery, except electrical	-0.34	-0.69	-1.03	-1.37	-1.72

Table 16.--Percentage change from 1985 to September 1989 projected level of exports, 2-digit input-output categories, based on estimated changes in the price of steel because of import restraint program--Continued.

Input-output sector	Industry description	Estimated percentage change in exports				
		1985	1986	1987	1988	1989 1/
51	Office, computing, and accounting machines	-0.44	-0.87	-1.31	-1.74	-2.18
52	Service industries machines	-0.42	-0.83	-1.25	-1.66	-2.08
53	Electric industrial equipment and apparatus	-0.53	-1.05	-1.58	-2.11	-2.63
54	Household appliances	-0.79	-1.56	-2.34	-3.12	-3.89
55	Electric lighting and wiring equipment	-1.23	-2.45	-3.67	-4.87	-6.06
56	Radio, TV, and communication equipment	-0.15	-0.29	-0.44	-0.59	-0.73
57	Electronic components and accessories	-0.50	-1.00	-1.50	-2.01	-2.50
58	Misc. electrical machinery and supplies	-0.85	-1.70	-2.55	-3.39	-4.22
59	Motor vehicles and equipment	-1.27	-2.52	-3.77	-5.00	-6.23
60	Aircraft and parts	-0.61	-1.21	-1.82	-2.42	-3.03
61	Other transportation equipment	-1.07	-2.12	-3.18	-4.22	-5.26
62	Scientific and controlling instruments	-0.36	-0.72	-1.08	-1.44	-1.80
63	Optical, ophthalmic, and photographic equipment	-0.07	-0.13	-0.20	-0.27	-0.34
64	Miscellaneous manufacturing	-0.35	-0.69	-1.04	-1.39	-1.73
65	Transportation and warehousing	0.00	0.00	0.00	0.00	0.00
66	Communications, except radio and TV	0.00	0.00	0.00	0.00	0.00
67	Radio and TV broadcasting	0.00	0.00	0.00	0.00	0.00
68	Electric, gas, water, and sanitary services	0.00	0.00	0.00	0.00	0.00
69	Wholesale and retail trade	0.00	0.00	0.00	0.00	0.00
70	Finance and insurance	0.00	0.00	0.00	0.00	0.00
71	Real estate and rental	0.00	0.00	0.00	0.00	0.00
72	Hotels, personal and repair services exc. auto	0.00	0.00	0.00	0.00	0.00
73	Business services	0.00	0.00	0.00	0.00	0.00
74	Eating and drinking places	0.00	0.00	0.00	0.00	0.00
75	Automobile repair and services	0.00	0.00	0.00	0.00	0.00
76	Amusements	0.00	0.00	0.00	0.00	0.00
77	Medical, educ. services and nonprofit org.	0.00	0.00	0.00	0.00	0.00
78	Federal Government enterprises	0.00	0.00	0.00	0.00	0.00
79	State and local government enterprises	0.00	0.00	0.00	0.00	0.00
	Total	-0.59	-0.53	-0.79	-1.06	-1.32

1/ January through September 1989.

Source: Compiled from official statistics of the U.S. Bureau of the Census.

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Generally, the impact of the import restraint program on industry exports increases over the period. The effect, however, differs across industries. For nonmanufacturing industries, exports are lower throughout the period by less than 1 percent because of the import restraint program. As expected, manufacturing industries, particularly those that use steel most intensively, experience larger percentage reductions in the level of their exports.

The U.S. industries that would experience the largest absolute losses in exports are those concentrated among input-output sectors 37 through 64. The 10 industries that would experience the largest export declines in 1985 are as follows:

Input-output sector	Industry	Change in exports 1/
59	Motor vehicles and equipment	-225,076,000
60	Aircraft and parts	-95,234,000
51	Office, computing, and accounting machines	-70,476,000
45	Construction and mining machinery 2/	-46,590,000
47	Metalworking machinery and equipment	-34,443,000
43	Engines and turbines	-29,465,000
64	Miscellaneous manufacturing	-29,227,000
61	Other transportation equipment	-24,233,000
37	Primary iron and steel manufacturing 3/	-21,455,000
49	General machinery and equipment 4/	-20,624,000

1/ Exports are f.a.s. (free alongside ship) value, compiled from Department of Commerce, U.S. Exports, Schedule B.

2/ The construction machinery and equipment industry (input-output industry 45.0100) is reviewed in greater detail in this report.

3/ The steel pipes and tubes industry (input-output industry 37.0105) is reviewed in greater detail in this report.

4/ The ball and roller bearings industry (input-output industry 49.0200) is reviewed in greater detail in this report.

The 10 industries that by 1989 experience the largest percentage reduction in their exports are as follows:

Input-output sector	Industry	Percentage change in 1989 exports
59	Motor vehicles and equipment	-6.23
47	Metalworking machinery and equipment	-6.09
55	Electric lighting and wiring equipment	-6.06
39	Metal containers 1/	-5.48
61	Other transportation equipment	-5.26
41	Screw machine products and stampings	-5.04
37	Primary iron and steel manufactuing 2/	-4.41
42	Other fabricated metal products	-3.85
45	Construction and mining machinery 3/	-3.75
43	Engines and turbines	-3.24

1/ The metal barrels, drums, and pails industry (input-output industry 39.0200) is reviewed in greater detail in this report.

2/ The steel pipes and tubes industry (input-output industry 37.0105) is reviewed in greater detail in this report.

3/ The construction machinery and equipment industry (input-output industry 45.0100) is reviewed in greater detail in this report.

Table 17 summarizes the impact of the increase in the price of steel on U.S. exports by aggregate sector. Since steel is used throughout the economy, an increase in its price reduces exports in all sectors, and the effects rise over time. As a percent of total exports, the least affected sector is agriculture. In the first year of the program, the agricultural sector experiences a 0.05 percent decline in its exports in 1985 and a 0.24 percent difference in the level that would have existed without the program by the third quarter of 1989. However, in light of the size of agricultural exports, the percentage reduction in agricultural exports in 1985 amounts to a reduction of $14.1 million and a difference of $88.9 million by the third quarter of 1989. As indicated by the industries listed above, the sector that would experience the largest effect is the manufacturing sector. In 1985, manufacturing exports declined 0.46 percent and by the third quarter of 1989 the difference between the level of exports without the steel restraint program and the level of exports with a program will be 2.27 percent. In value terms, manufacturing exports decline $876 million in 1985 and will differ by $5.5 billion as of the third quarter of 1989.

The changes in the value of manufacturing exports account for the majority of the change in total exports. The percentage changes in the level of a sector's exports relative to the total change are as follows: manufacturing, 97.0; agriculture, 1.6; mining, 0.9; petroleum, 0.5; and services, 0.

Table 17--Summary: Projected exports with and without steel restraint program, and estimated changes because of steel restraint program, for 1985-1989.

Industry and measure	1985	1986	1987	1988	1989 1/
Agriculture:					
Exports, w/o restraints ($1,000)	29,110,517.13	30,857,148.16	32,708,577.05	34,671,091.67	36,601,522.58
Exports, w/ restraints ($1,000)	29,096,448.78	30,827,330.49	32,661,067.24	34,603,823.33	36,512,606.09
Change ($1,000)	14,068.35	29,817.67	47,509.81	67,268.34	88,916.50
Change (percent)	0.05	0.10	0.15	0.19	0.24
Manufacturing:					
Exports, w/o restraints ($1,000)	191,034,420.99	202,496,486.25	214,646,275.42	227,525,051.95	240,193,282.80
Exports, w/ restraints ($1,000)	190,158,362.19	200,646,386.89	211,709,079.50	223,381,363.97	234,735,903.81
Change ($1,000)	876,058.80	1,850,099.35	2,937,195.92	4,143,687.97	5,457,378.98
Change (percent)	0.46	0.91	1.37	1.82	2.27
Mining:					
Exports, w/o restraints ($1,000)	6,758,476.70	7,163,985.30	7,593,824.42	8,049,453.89	8,497,634.60
Exports, w/ restraints ($1,000)	6,750,622.66	7,147,345.08	7,567,320.93	8,011,942.39	8,448,070.25
Change ($1,000)	7,854.05	16,640.22	26,503.49	37,511.50	49,564.35
Change (percent)	0.12	0.23	0.35	0.47	0.58
Petroleum:					
Exports, w/o restraints ($1,000)	5,712,431.87	6,055,177.79	6,418,488.45	6,803,597.76	7,182,411.20
Exports, w/ restraints ($1,000)	5,707,500.58	6,044,727.97	6,401,841.49	6,780,032.13	7,151,267.73
Change ($1,000)	4,931.29	10,449.81	16,646.96	23,565.63	31,143.47
Change (percent)	0.09	0.17	0.26	0.35	0.43
Services:					
Exports, w/o restraints ($1,000)	968,912.49	1,027,047.24	1,088,670.07	1,153,990.27	1,218,242.61
Exports, w/ restraints ($1,000)	968,912.49	1,027,047.24	1,088,670.07	1,153,990.27	1,218,242.61
Change ($1,000)	0.00	0.00	0.00	0.00	0.00
Change (percent)	0.00	0.00	0.00	0.00	0.00

1/ January through September 1989.

Source: Computed from official statistics of the U.S. Bureau of the Census.

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Current Conditions

Revised 1985 import shares

For the first 8 months of 1985, the import share of steel mill products averaged 25.5 percent of apparent consumption. 1/ The USTR indicated that during the same period the EC has already exceeded the limits for certain product categories established under the U.S.-EC Arrangement. 2/ Although it is difficult to predict whether additional measures may be taken to fulfill the 18.5 limit for the remainder of the year, it appears highly unlikely that the import share limit set by the President will be achieved in the first year of the program. Consequently, the price of steel may not rise during 1985 as assumed in the analysis of the preceding section. This section therefore presents estimates of the effect of alternative import share assumptions on exports of steel-consuming industries. 3/ In each case, a calculation is presented of the percentage increase in the price of steel, the percentage reduction in steel imports, the reduction in U.S. exports, and the reduction in U.S. exports as a percent of total U.S. exports. The estimates provided in the following tabulation indicate that the less restrictive the actual import restraints, the lower the impact on the price of steel and on U.S. exports.

Assumed share of apparent consumption for 1985	Percentage change in--		Effect on U.S. exports of--	
	Price of steel	Steel imports	Absolute change	Percentage change
			1,000 dollars	
18.5	2.84	-30.4	-902,912	-0.39
20.5	2.09	-21.8	-664,467	-0.28
22.5	1.26	-12.8	-400,588	-0.17
24.5	.34	-3.3	-108,095	-0.05

1/ The import share for the 11-month period starting October 1984 has averaged 26.4 percent.

2/ Stuart Auerbach, "U.S. Threatens Embargo on European Steel," The Washington Post, Oct. 31, 1985, p. A1.

3/ Although the goal of restricting imports to an 18.5 share of the market was exceeded in 1985, there are expectations that it will be met the following years. See Stuart Auerbach, "U.S., EC Settle Tiff on Steel Limits," The Washington Post, Nov. 2, 1985, p. G1.

Steel price trends

The world steel market in recent years can be characterized as a buyers' market, with steel often selling below list price. The disparity has been greatest in the United States where discounts have grown progressively from 1 to 2 percent in 1981 to almost 20 percent during the January-March 1985. 1/ In four other major steel-producing countries--Japan, West Germany, the United Kingdom, and France--transaction prices (in the respective foreign markets) have been 2 to 3 percent below list prices in recent years, with France and the United Kingdom actually commanding small premiums during January-March 1985. Despite the substantial discounts, U.S. transaction prices have exceeded foreign prices in the respective home markets since 1981; during January-March 1985 the disparity ranged from 25 to 56 percent (fig. 4). 2/

As the case studies on bearings and pipes and tubes suggest, this disparity between foreign and domestic prices has been reflected in the U.S. market in the form of a two-tiered pricing structure. A model developed by World Steel Dynamics indicates that prices realized by U.S. producers in the U.S. market have exceeded those realized by importers since 1981. In 1984, the difference between the two averaged an estimated $44 per metric ton, which translates into a 9 percent premium for U.S. produced steel.

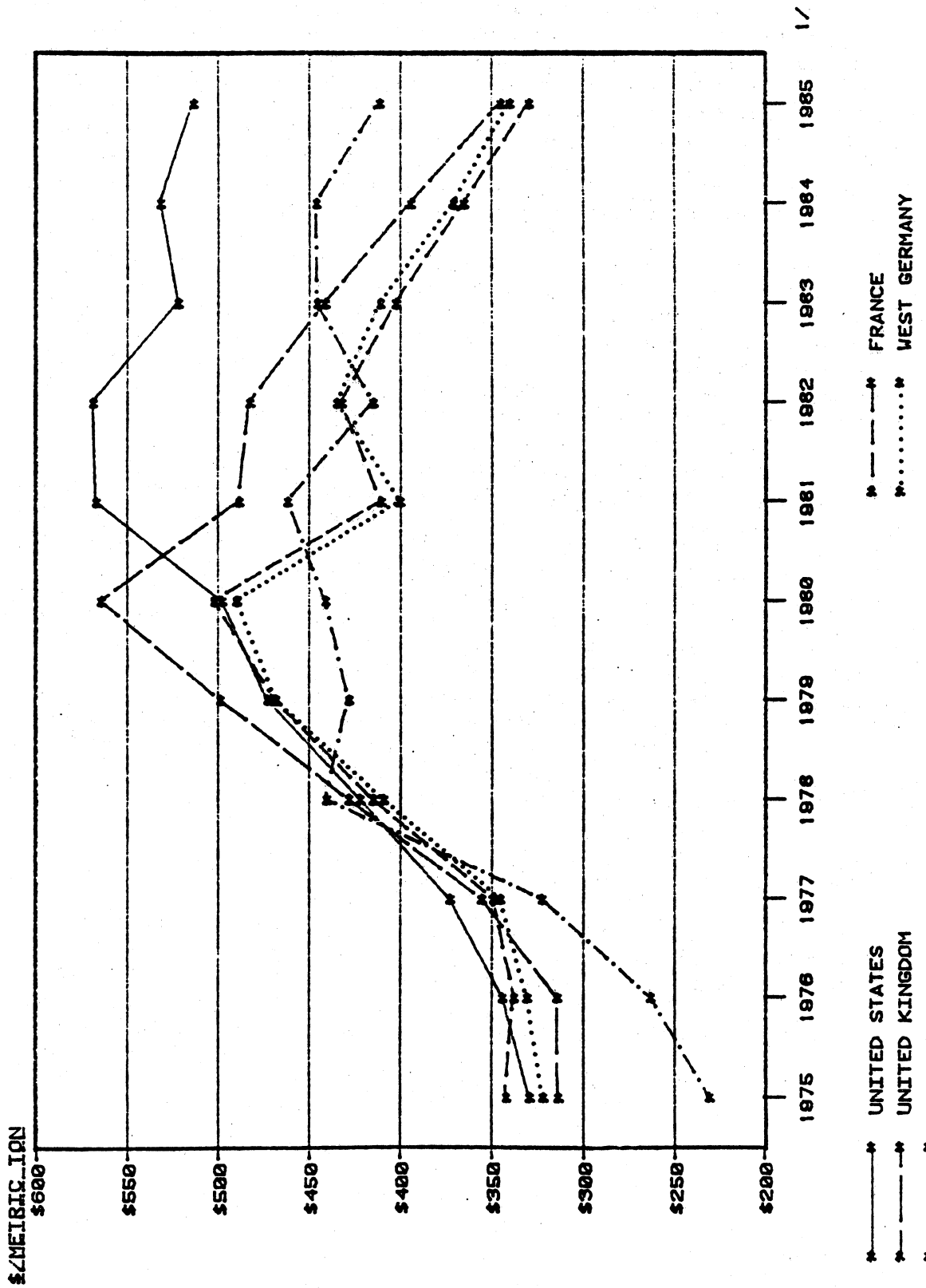
Part of the reason for the disparity in U.S. and foreign prices lies in the relatively high costs of steel production in the United States in recent years. As shown in figure 5, U.S. costs are estimated to have exceeded costs in certain other major foreign steel producing countries by 32 to 57 percent during January-March 1985. Relative costs, however, are affected significantly by changes in exchange rates. Analysts have estimated that exchange rates of 2.5 DM per dollar, 220 yen per dollar, 8.0 FF per dollar, and 0.6289 pounds per dollar ($1.59 per pound sterling) would roughly equalize U.S. and foreign costs in the U.S. market. 3/ Given these estimates, at exchange rates prevailing during early November, 1985, U.S. production costs are below those of Japan, equal to those of France, but still above those of West Germany and the United Kingdom. The weakening of the dollar should affect relative prices in a similar fashion, leading to a narrowing, or elimination, of foreign advantages in this area.

Effect of depreciation of real exchange rate

As can be seen, developments in exchange rates have a significant impact on relative steel prices and costs. Once the steel VRA's are in place, however, the implications of a real depreciation of the exchange rate are more

1/ Paine Webber: World Steel Dynamics, The Steel Strategist, September 1985.
2/ Ibid.
3/ Ibid. Foreign costs include a $75 per metric ton cost of importing steel to the United States.

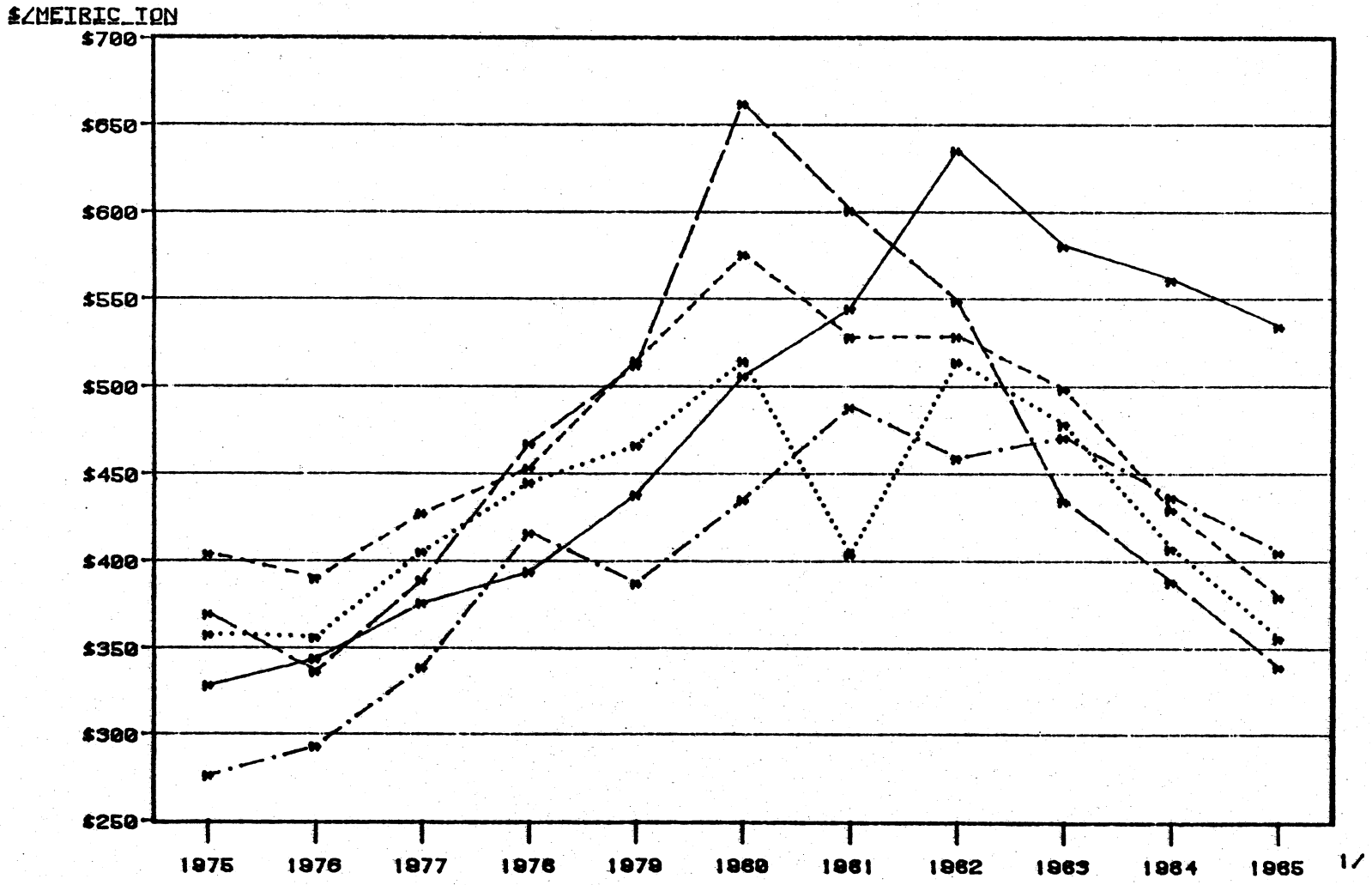
FIGURE 4: COMPOSITE CARBON STEEL TRANSACTION PRICES



1/ JANUARY-MARCH 1985 AVERAGE

Source: Paine Webber, World Steel Dynamics.

FIGURE 5: CARBON STEEL PRODUCTION COSTS
AT ACTUAL OPERATING RATES



1/ JANUARY-MARCH 1985 AVERAGE

Source: Paine Webber, World Steel Dynamics.

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complex. In particular, the depreciation may or may not have an impact on the steel market, while exports of domestic steel-consuming industries are always affected. To explain the effect of the real depreciation of the dollar, the following discussion first considers the depreciation's impact on the steel market and then on the exports of domestic steel-consuming industries. 1/

The effect of the depreciation on the steel import restraint program depends on the size of the depreciation relative to the increase in the price of steel imports caused by the import restraints. If the dollar depreciation is less than or equal to the increase in the price of imported steel, then the depreciation only serves to eliminate quota rents being earned by foreign steel exporters. It would not affect the volume of imports or the U.S. price of these imports. If the dollar depreciation exceeds the increase in the price of imported steel, then the steel restraint program no longer restrains imports. Instead, it is the depreciation of the dollar that raises the imported price of steel and is responsible for the increase in domestic production costs.

In the previous section, it was estimated that if the import restraint program restrained imports to 18.5 percent of apparent consumption, the real price of imported steel would rise by approximately 8.9 percent. Thus, if the real exchange rate depreciates by 8.9 percent or less, neither the price or the quantity of imported steel is affected. Instead, importers earn less per unit of dollar sales since the depreciation lowers the foreign currency value of import receipts denominated in dollars. To maintain a constant price in terms of their own currency, the dollar price would have to increase. A real depreciation of the dollar exceeding 8.9 percent would make the steel import restraint program ineffective since depreciations of that magnitude would cause U.S. customers to buy less steel imports than the amount allowed under the restraint.

In the export market, a depreciation of less than 8.9 percent does reduce the effects of the restraints on the value of exports, even though it does not affect the price or volume of steel imports. As an example, suppose the real exchange rate depreciated 8.9 percent. Then, if the steel restraint program were removed, the price and volume of steel imports would remain unchanged. Therefore, we would have to say that the steel restraint program no longer had any effect.

The above discussion has been limited to the effect of a depreciation on the estimates of the effect of the steel restraint program on exports of steel-consuming industries. A depreciation would, of course, cause exports of steel-consuming industries to become more competitive internationally and lead to an increase in their value. In tables 18 through 19, we provide estimates of the effect of a 10, 20, and 30 percent real depreciation of the dollar on the exports of steel-consuming industries. Although these effects would occur with some lags, the import restraint program no longer would be effective under these circumstances.

1/ The following discussion considers only the consequences of a real depreciation of the dollar. A real depreciation of the dollar is a nominal depreciation adjusted for movements in national price levels.

Table 18.--Estimated change in U.S. exports from 1985 levels because of 10, 20, and 30 percent real depreciation of the exchange rate by 2-digit input-output categories.

(In thousands of dollars)

Input-output sector	Industry description	Effect of 10 percent real depreciation	Effect of 20 percent real depreciation	Effect of 30 percent real depreciation
50	Miscellaneous machinery, except electrical	244,165	488,329	732,494
51	Office, computing, and accounting machines	7,135,201	14,270,402	21,405,602
52	Service industries machines	230,741	461,483	692,224
53	Electric industrial equipment and apparatus	689,302	1,378,603	2,067,905
54	Household appliances	246,841	493,682	740,523
55	Electric lighting and wiring equipment	472,571	945,143	1,417,714
56	Radio, TV, and communication equipment	1,312,180	2,624,359	3,936,539
57	Electronic components and accessories	4,249,071	8,498,143	12,747,214
58	Misc. electrical machinery and supplies	1,902,134	3,804,268	5,706,402
59	Motor vehicles and equipment	4,251,456	8,502,911	12,754,367
60	Aircraft and parts	5,890,507	11,781,014	17,671,521
61	Other transportation equipment	519,330	1,038,660	1,557,990
62	Scientific and controlling instruments	1,646,156	3,292,312	4,938,468
63	Optical, ophthalmic, and photographic equipment	345,746	691,492	1,037,239
64	Miscellaneous manufacturing	2,358,714	4,717,428	7,076,142
65	Transportation and warehousing	0	0	0
66	Communications, except radio and TV	0	0	0
67	Radio and TV broadcasting	0	0	0
68	Electric, gas, water, and sanitary services	0	0	0
69	Wholesale and retail trade	0	0	0
70	Finance and insurance	0	0	0
71	Real estate and rental	0	0	0
72	Hotels, personal and repair services exc. auto	0	0	0
73	Business services	0	0	0
74	Eating and drinking places	0	0	0
75	Automobile repair and services	0	0	0
76	Amusements	0	0	0
77	Medical, educ. services and nonprofit org.	0	0	0
78	Federal Government enterprises	0	0	0
79	State and local government enterprises	0	0	0
	Total	55,366,684	110,733,368	166,100,052

Source: Compiled from official statistics of the U.S. Bureau of the Census.

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Table 18.--Estimated change in U.S. exports from 1985 levels because of 10, 20, and 30 percent real depreciation of the exchange rate by 2-digit input-output categories.

(In thousands of dollars)

Input-output sector	Industry description	Effect of 10 percent real depreciation	Effect of 20 percent real depreciation	Effect of 30 percent real depreciation
1	Livestock and livestock products	87,519	175,039	262,558
2	Other agricultural products	5,918,016	11,836,033	17,754,049
3	Forestry and fishery products	25,479	50,958	76,437
4	Agricultural, forestry, and fishery services	0	0	0
5	Iron and ferroalloy ores mining	64,598	129,195	193,793
6	Nonferrous metal ores mining	19,996	39,992	59,988
7	Coal mining	596,689	1,193,377	1,790,066
8	Crude petroleum and natural gas	51,506	103,012	154,519
9	Stone and clay mining and quarrying	81,551	163,101	244,652
10	Chemical and fertilizer mineral mining	54,172	108,344	162,516
11	New construction	0	0	0
12	Maintenance and repair construction	0	0	0
13	Ordnance and accessories	245,757	491,514	737,270
14	Food and kindred products	3,210,817	6,421,633	9,632,450
15	Tobacco manufactures	331,695	663,389	995,084
16	Broad and narrow fabrics, yarn and thread mills	132,883	265,767	398,650
17	Miscellaneous textile goods and floor coverings	104,856	209,713	314,569
18	Apparel	188,444	376,889	565,333
19	Miscellaneous fabricated textile products	43,136	86,272	129,409
20	Lumber and wood products, except containers	858,254	1,716,507	2,574,761
21	Wood containers	5,456	10,911	16,367
22	Household furniture	34,319	68,638	102,957
23	Other furniture and fixtures	33,389	66,779	100,168
24	Paper and allied products, except containers	1,827,168	3,654,336	5,481,504
25	Paperboard containers and boxes	0	0	0
26	Printing and publishing	555,293	1,110,587	1,665,880
27	Chemicals and selected chemical products	2,495,081	4,990,161	7,485,242
28	Plastics and synthetic materials	871,687	1,743,374	2,615,061
29	Drugs, cleaning and toilet preparations	578,401	1,156,802	1,735,203
30	Paints and allied products	43,838	87,675	131,513
31	Petroleum refining and related industries	871,427	1,742,854	2,614,282
32	Rubber and miscellaneous plastic products	570,265	1,140,530	1,710,795
33	Leather tanning and finishing	63,076	126,152	189,228
34	Footwear and other leather products	47,294	94,589	141,883
35	Glass and glass products	69,937	139,874	209,812
36	Stone and clay wear	158,473	316,946	475,419
37	Primary iron and steel manufacturing	281,294	562,587	843,881
38	Primary nonferrous metals manufacturing	178,151	356,301	534,452
39	Metal containers	14,788	29,576	44,364
40	Heating, plumbing, and structural metal product	24,956	49,912	74,868
41	Screw machine products and stampings	31,058	62,115	93,173
42	Other fabricated metal products	245,175	490,350	735,526
43	Engines and turbines	474,502	949,003	1,423,505
44	Farm and garden machinery	167,226	334,453	501,679
45	Construction and mining machinery	645,426	1,290,852	1,936,278
46	Materials handling machinery and equipment	85,068	170,137	255,205
47	Metalworking machinery and equipment	879,903	1,759,807	2,639,710
48	Special industry machinery and equipment	220,172	440,344	660,516
49	General machinery and equipment	384,378	768,756	1,153,134

Table 19.--Summary: estimated change in U.S. exports from 1985 levels because of 10, 20, and 30 percent real depreciation of the exchange rate.

(In thousands of dollars)

Industry description	Effect of 10 percent real depreciation	Effect of 20 percent real depreciation	Effect of 30 percent real depreciation
Agriculture	6,031,015	12,062,030	18,093,045
Manufacturing	47,595,731	95,191,462	142,787,193
Mining	817,005	1,634,010	2,451,015
Petroleum	922,933	1,845,867	2,768,800
Services	0	0	0
Total	55,366,684	110,733,368	166,100,052

Source: Compiled from official statistics of the U.S. Bureau of the Census.

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CASE STUDIES OF STEEL-CONSUMING INDUSTRIES

To attain a certain degree of manageability, aggregation is necessary in a study of this scope. Aggregation, however, obscures the effects on individual industries. As a result, four industries were selected for closer analysis. A major consideration in the selection of an industry for a case study was its expressed concern as to the effects of the steel restraint programs on their exports. Those industries that responded to the public notice of the investigation or chose to participate at the public hearing received initial consideration. 1/ An effort was also made to ensure that the industries included in this investigation were representative of steel-consuming industries whose exports are likely to be affected by an increase in the price of steel. As discussed in the overview of steel-consuming industries, three characteristics of industries likely to be affected by the VRA's are (1) importance of the industry's steel purchases relative to total U.S. steel purchases, (2) steel use as a share of the industry's total costs of production, and (3) importance of the industry's exports relative to total U.S. exports. For the four industries listed below, tables 2, 3, and 4 illustrate that they are among the top 20 U.S. industries when ranked according to at least 2 of these 3 key characteristics.

Industry	Input-output classification
Ball and roller bearings	49.0200
Construction machinery and equipment	45.0100
Metal barrels, drums, and pails	39.0200
Steel pipes and tubes	37.0105

Ball and Roller Bearing Industry: An Overview

Description and Uses

The function of a bearing is to reduce friction between moving parts and thereby enable easier, faster motion. Bearings are high-precision products that operate in practically every industrial and military device. Antifriction bearings may be classified in two broad categories: ball bearings and roller bearings. The principal differences are in the rolling elements (balls and rollers) and in their respective abilities to carry loads. Ball bearings, having less contact between the rolling balls and the case, can withstand fairly high speeds; however, when load-carrying capacity is considered more important than high speeds, roller bearings are more likely to be used.

Ball and roller bearings are generally not interchangable, but the original determination of which type to use is sometimes a matter of choice based on the characteristics above and other engineering factors specific to a product.

1/ See app. C for a listing of industries that participated at the public hearing.

Industry profile

Eighty-three firms, operating a total of 140 manufacturing establishments, produce ball and roller bearings in the United States. Four major producers account for 56 percent of the value of industry shipments. Smaller "specialty" bearings producers, and firms producing for their own consumption, account for the remainder of U.S. production. Most manufacturers produce either ball or roller bearings, with about 15 firms producing both.

Total employment in the ball and roller bearing industry declined from 57,900 in 1980 to 49,600 in 1984, or by 14 percent; whereas production worker employment decreased by almost 18 percent. During 1982, Connecticut, South Carolina, and Indiana employed 36 percent of all workers and 34 percent of all production workers in the bearing industry. Other States employing workers from that industry include Pennsylvania, Ohio, Georgia, New Hampshire, and New Jersey. 1/

In response to more intense offshore competition, domestic bearing manufacturers have begun to consolidate production facilities and eliminate as many as 500 salaried employees through early retirement, attrition, and layoffs. 2/

U.S. market

The U.S. market for bearings consists primarily of the producers of motor vehicles and of all types of machinery and equipment. The U.S. market for bearings increased due to the growth of the automotive industry as well as the slight increase in farm and construction machinery during 1984-85. In 1977, about 24 percent of domestic producers' shipments went to the automotive industry, 29 percent to industries producing farm machinery, general industrial machinery, and construction machinery, 8 percent to the aircraft and parts industry, and the remaining 39 percent went to a number of smaller industries. 3/

Apparent U.S. consumption of ball and roller bearings and parts, decreased from $3.4 billion in 1980 to $3.0 billion in 1982, and then rose to $4.0 billion in 1984. During 1980-84, parts and components for ball and roller bearings, including rollers and balls sold separately, showed the largest increase in apparent consumption, rising from $328 million in 1980 to $426.2 million in 1984. A contributing factor to this significant increase of consumption for bearing parts was the increase in the bearing replacement market. Consumption of replacement bearings increased, as machinery users were more likely to repair machinery rather than purchase new machinery. Apparent U.S. consumption for other major types of bearings also increased during 1980-84; ball bearings, complete, increased by 18 percent; mounted ball and roller bearings by 16 percent; roller bearings, complete, by 14 percent;

1/ 1982 Census of Manufactures.

2/ Industry interviews.

3/ Selected Material Consumers, MC-77-SR-11, 1977, U.S. Department of Commerce, Bureau of the Census.

and tapered roller bearings by 9 percent. The increase in consumption in 1984, for all types of ball and roller bearings, was in response to increased demand by producers in the automotive, construction, metalworking, and aircraft industries.

Table 20.--Ball and roller bearings and parts thereof: U.S. producers' shipments, exports of domestic merchandise, imports for consumption, and apparent consumption, 1980-84

Year	Producers' shipments	Exports	Imports	Apparent consumption	Ratio of imports to consumption
	Million dollars				Percent
1980	3,262	369	489	3,382	14.5
1981	3,583	382	485	3,685	13.1
1982	2,891	310	454	3,035	14.9
1983	2,956	253	423	3,126	13.5
1984	3,627	331	628	3,924	16.0

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

Official statistics of the U.S. Department of Commerce showed that U.S. imports of ball and roller bearings increased irregularly from $489 million in 1980 to $628 million in 1984. This large increase of imports in 1984 can be attributed largely to greater price competition by importers of high-volume bearing lines. Ball bearings, complete, accounted for 47 percent ($295 million) of all bearings imports in 1984 compared with 55 percent ($263 million) in 1980. Imports of tapered roller bearings, cups and cones increased 139 percent during 1980-84, from $66 million to $158 million; accounting for 25 percent of all bearing imports in 1984.

Ball and Roller Bearing Industry: Effects of the VRA's

Effect on the costs of production

Bearing steel (wire, wire rods, tube, and bar) is a major component in the production of ball and roller bearings. Steel costs represent approximately 40 percent of the costs of production. Critical factors in steel purchasing decisions for bearing producers are quality and price. According to industry sources, the majority of U.S. bearing manufactures buy foreign steel because the quality grade needed for bearings is not readily available from the U.S. steel industry at prices as low as imported steel. Industry sources indicate that 90 percent of all bearing steel is imported and that 90 percent of imported bearing steel comes from Japan, Sweden, the United Kingdom, West Germany, and France. In 1985, imported West German bearing steel is reported to average 17 percent less than that of U.S. suppliers; Japanese, French, British, and Swedish steel prices average 14 percent lower than U.S. steel prices. Sources indicate that even if U.S. steel manufacturers were willing to improve and modify techniques to

produce the type of steel needed for bearing production at a competitive price, such production may not be able to supply the domestic demand for at least 5 years.

According to certain industry sources, the percent of steel purchases used for exported bearing products, by type of steel products, are as follows: 1/

Steel products	Share of total (percent)
Plates	0
Sheets and strip	30
Structural shapes	0
Pipes and tubes	18
Semifinished steel (ingots, blooms, billets, slabs)	5
Wire rod	14
Wire	6-7
Rails and related railway materials	0
Bars	22
Total	100

To date, availability of imported steel for use in export bearing products has not become a problem for U.S. bearing producers. However, U.S. producers expect that if restraint agreements continue there will be a shortage of imported steel materials forcing bearing producers to source domestically from other bearing manufacturers with steel producing capacity. This may result in steel shortages from domestic suppliers since the demand for domestic bearing steel may exceed supply. 2/

Effect on exports

The value of U.S. exports for ball and roller bearings fell from $369 million in 1980 to $331 million in 1984, according to official statistics of the U.S. Department of Commerce. U.S. exports to France, South Africa, and Brazil declined the most. The value of U.S. exports to France fell from $24 million in 1980 to $10 million in 1984; exports to South Africa decreased from $15 million in 1980 to $9 million in 1984; and exports to Brazil fell from $16 million in 1980 to $9 million in 1984. U.S. exports to Mexico, Australia, the United Kingdom, and Belgium also decreased. However, in 1984, U.S. exports to Canada (who accounted for one-third of U.S. exports in 1983) and West Germany increased by 18 percent and 22 percent, respectively (see the following table).

1/ Staff interviews with industry officials.
2/ Ibid.

Because major bearing competitors, such as Japanese and European producers, benefit from lower steel prices, the high cost of steel available to U.S. producers, whether from domestic or foreign sources, has become a major factor in the loss of export markets.

Effect on investment

U.S. bearing manufacturers with subsidiaries abroad are primarily concentrated in Western Europe (especially, France, the United Kingdom, Italy, and West Germany) and Latin America (especially, Brazil and Mexico). Larger U.S. bearing manufacturers are increasing their investment in facilities abroad to increase competitiveness, and lower their material and labor costs.

Table 21.--Ball and roller bearings and parts thereof: U.S. exports of domestic merchandise, by principal markets, 1980-84,

(In thousands of dollars)

Market	1980	1981	1982	1983	1984
Canada	92,914	103,090	78,058	83,555	110,381
Mexico	52,067	57,155	32,358	18,970	38,998
West Germany	18,628	21,068	19,431	18,435	21,542
United Kingdom	18,534	15,017	17,915	13,755	16,793
Australia	15,286	15,250	13,340	10,762	13,942
Belgium	12,794	11,438	12,618	8,506	11,572
Venezuela	10,946	13,171	13,437	5,696	11,416
France	23,846	17,179	14,539	11,445	10,116
Brazil	15,801	15,201	9,732	6,361	9,280
South Africa	15,281	16,155	13,049	6,123	8,552
All other	92,769	97,167	85,838	69,528	77,988
Total	368,506	381,892	310,317	253,136	330,579

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Construction Machinery and Equipment Industry: An Overview

Description and uses

Construction machinery covered by this study includes those products classified in SIC category No. 3531, namely earthmoving equipment, excavators and cranes, and a host of other types of machinery such as asphalt equipment, and rock-crushing and screening equipment. The initial step in the production of most types of construction machinery includes the use of castings, plates, and tubular steel, which are welded together to produce a frame. The vehicle is then built-up by adding the undercarriage and engine with its components already attached. Sheet metal is then utilized to form the applicable enclosures. During the final stage of production, the track is added to the undercarriage of the machine.

Industry profile

During 1980-84, there were approximately 922 producers of construction machinery primarily concentrated in Illinois, Iowa, Wisconsin, Ohio, and Michigan. In 1982, the industry operated at 40 percent or less of capacity, due in part to a strike at the largest manufacturer, which ran from October 1982 to April 1983. 1/ Although, the industry operated at 70 percent of capacity during 1985, this is due to the fact that much of the excess past years' capacity within the industry was eliminated through plant consolidations and closings. 2/

The construction machinery industry is a very mature industry consisting of a wide variety of products and production technologies. The considerable overcapacity in the industry since 1981 has been the result of a sharp decline in demand. To adjust most U.S. producers have undertaken cost-reduction and rationalization measures to reduce this overcapacity. There has been a trend towards mergers and acquisitions and a decrease in inventory levels. 3/

Total employment in the construction machinery industry declined by 40 percent, from 158,000 in 1980 to 95,000 in 1984, because the economic recession resulted in factory shut-downs and layoffs. The average hourly earnings of production workers increased by 25 percent from $10.60 in 1980 to $13.25 in 1984. 4/

According to the Construction Industry Manufacturers Association, whose members account for over 90 percent of the value of all construction machinery produced in the United States, net sales of construction equipment and parts totaled $12.7 billion in 1984. From 1977 to 1983, net profits in the construction machinery industry fell from 9.6 percent of sales to -0.8 percent. In 1984, overall domestic sales in the industry increased by 30 percent, but many of the major producers continued to experience losses. The major producers expect to break even by the end of 1985 with the help of inventory liquidations and other cost-cutting measures. 5/

U.S. market

Apparent consumption of construction machinery declined by 9 percent from $10.9 billion in 1980 to $10 billion in 1984. U.S. producers' shipments decreased from $15.9 billion in 1980 to $11.6 billion in 1984, representing a decline of 27 percent (Table 22). During this period, sales were depressed by high-interest rates; low levels of building construction and surface and strip-mining activity; and reduced spending on highways, recreation projects, and water and sewer facilities. From 1983 to 1984, shipments increased 13 percent, from $10.3 billion in 1983 to $11.6 billion in 1984. The recovery of

1/ Standard & Poor's, Industry Surveys, October 25, 1984.
2/ Interview with Department of Commerce Official, October 1985.
3/ U.S. Department of Commerce, A Competitive Assessment of the U.S. Construction Equipment Industry, February 1985.
4/ U.S. Industrial Outlook, 1985.
5/ Interview with Industry Officials, October 1985.

shipments in 1984 was due mostly to an increase in construction activity, particularly housing starts that increased the demand for small- and medium-sized earthmoving machinery. Sales of construction machinery lagged behind the economic recovery of other major manufacturing sectors because of large quantities of new, idle equipment that contractors could utilize. Sales of construction equipment for the surface mining industry only increased slightly in 1984. 1/

Table 22.--Construction machinery and parts thereof: U.S. producers' shipments, exports of domestic merchandise, imports for consumption, and apparent consumption, 1980-84

Year	Producers' shipments	Exports	Imports	Apparent consumption	Ratio of imports to consumption
	Million dollars				Percent
1980	15,994	5,742	736	10,988	7
1981	16,930	6,316	887	11,501	8
1982	11,735	3,968	778	8,545	9
1983	10,305	2,393	641	8,553	8
1984	11,550	2,675	1,125	10,000	11

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

During 1980 to 1984, imports of construction machinery rose by 53 percent from $736 million to $1.1 billion. Such imports rose over 60 percent during January-June 1985 ($949 million) compared with the same period in 1984 ($595 million). The rise in imports is a result of increased construction activity in the United States compared with other areas of the world and the lower prices of imported construction machinery caused, in part, by the relative strength of the dollar vis-a-vis other currencies. The Japanese, in particular, have more than doubled their share of the U.S. construction machinery market from 3 percent in the early 1980's to 7 percent in 1984. By the end of 1985, Japanese imports are expected to account for 10 percent of the construction machinery market for smaller equipment, such as crawler tractor and wheel loaders. 2/

1/ U.S. Industrial Outlook, 1979-1985.
2/ Interview with Department of Commerce Official, October 1985.

Construction Machinery and Equipment Industry: Effects of the VRA's

Effect on the costs of production

The construction machinery industry was the second largest consumer of steel in the United States during the 1970's and is among the top five to date. This industry is also one of the largest purchasers and exporters of U.S. produced steel. The construction equipment industry accounts for over 12 percent of domestic steel consumption, including direct and indirect purchases by suppliers of components. 1/

The VRA's are expected to have a significant effect on the production and export of construction equipment. The restraints on steel imports have already affected investment decisions and resulted in some steel shortages. 2/ Although the major producers indicate that the volume of steel imports during January-August 1985 were higher than the negotiated levels, steel imports are expected to drop. There has been a lag in the demand for steel in the construction equipment industry that has been depressed since 1982. Once construction equipment sales and steel demand recovers, industry sources believe that the impact of the VRA's will be felt in the form of higher prices of both domestic and foreign steel. Higher steel prices would have an adverse effect on the competitiveness of U.S. producers, according to industry sources, especially in the replacement parts sector where foreign competitors are reportedly able to undersell these products at 60 percent below U.S. producers' costs of production. 3/ Industry sources claim they will not be able to absorb any additional price rises for steel and be able to compete with foreign producers of construction machinery who are not faced with such high costs of raw materials.

The impact of any increase in steel prices will affect some products more than others, depending on their steel content. For some parts, steel accounts for less than 15 percent of the cost of the finished product; for other parts, such as track shoes for crawler tractors, the steel content amounts to about 70 percent of the total value. Large U.S. producers indicate that raw steel accounts for about 50 percent of their total production costs of construction machinery and up to 70 percent with respect to replacement parts. 4/ Approximately 30 percent of total production costs can be attributed to labor, while 20 percent consists of energy, depreciation, and other fixed and variable operating expenditures.

1/ Prehearing brief submitted by Caterpillar Tractor Co. in conjunction with USITC investigation No. 332-214, September 23, 1985.

2/ Interview with industry sources, October 1985.

3/ Prehearing brief submitted by Caterpillar Tractor Co. in conjunction with U.S. International Trade Commission investigation no. 332-214, September 25, 1985.

4/ Ibid.

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For smaller manufacturers, raw steel accounts for only 5 percent of total costs, and finished steel components amount to 65 percent of total costs. Raw steel purchases by smaller manufactures consist principally of plates, flats, and rounds. Semi-finished steel (billets and bars) and special sections are primarily used in the production of replacement parts. Most of the steel used in the production of construction machinery is purchased directly from steel mills, but in some cases, manufacturers have "just-in-time" 2/ relationships with distributors to supply smaller lots of certain grades of steel.

Industry sources indicate that the major criteria used in steel purchasing decisions, by order of importance, are quality or suitability, reliability of supply and price. Construction machinery manufacturers first attempt to locate a mill or distributor which offers the particular type of steel needed. In most cases, producers try to find channels of distribution which can supply a steel profile closest to the finished product in order to keep machining costs to a minimum. Reliability of the supplier for including on-time delivery is also important, especially for smaller volume, specialized parts. Once a manufacturer is satisfied with the quality and commitment of a particular supplier, the key concern becomes price. [**
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Construction equipment manufacturers report that shortages of both domestic and foreign steel supplies have been limited to only a few types of steel, but that eventually regional and more severe shortages could develop.
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2/ "Just-in-time" means that suppliers carry as little inventory as necessary in order to meet customers' requirements.

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**] In addition, U.S. producers have been forced to turn to overseas suppliers for purchases of steel blooms used in the production of certain undercarriage components. This change in procurement occurred because of the closure of several domestic mills and a lack of commitment on the part of remaining domestic suppliers to meet manufacturers' specifications. Industry sources note that once the full impact of the restraints on steel take effect, shortages could arise on the west coast which receives most of its steel from the Far East and in Texas where manufacturers import Mexican steel.

No major changes occurred in steel purchasing patterns among U.S. construction equipment manufacturers before or after the U.S.-EC Arrangement went into effect. Currently, approximately 84 percent of the largest equipment producers' steel purchases are from domestic sources, compared with 16 percent from foreign sources. This ratio has remained relatively constant over the past five years.

Effect on exports

The export market has accounted for about one-third of U.S. shipments of construction machinery in recent years. U.S. exports of construction machinery reached a historical peak of $6.3 billion in 1981, an increase of 13 percent over the $5.7 billion reported for the previous year. 1/ However, between 1980 and 1984, U.S. exports dropped by more than 50 percent to $2.7 billion in 1984. This sharp decline in exports of construction machinery was due to several demand-related factors including: the worldwide recession; debt problems in developing nations; and the strength of the dollar in relation to the currencies of other countries. During 1985, according to Department of Commerce & industry projections, exports of construction machinery are expected to increase by about 11 percent to about $3 billion.

There are more than 160 major manufacturers of construction machinery worldwide, producing approximately 1,000 models of earthmoving and construction machinery. In 1970, four out of the five leading producers of construction equipment were U.S.-based companies. In 1985, three of the top five producers were foreign manufacturers. The primary foreign competitors of U.S. construction equipment manufacturers are Japan, Italy, and West Germany. The Japanese compete with U.S. manufacturers in the production of medium-sized construction machinery. The Italian construction machinery producers are noted for producing replacement parts that are sold to producers worldwide, including the United States and Japan. Because of low levels of demand for construction equipment in most of the developing and underdeveloped countries, these nations have very limited domestic production capabilities, except for Brazil and Korea which are emerging as future sources of competition. U.S. firms export construction machinery to 150 other nations. The primary export markets for U.S. producers are Canada, China, the United Kingdom, Singapore, and Australia.

1/ U.S. Department of Commerce U.S. Industrial Outlook, 1982

U.S. producers indicate that they have been successful in gaining market shares in the past because of their reputation for product reliability and servicing. Currently, foreign producers are underselling U.S. producers by 30 percent, depending on the part or product. Some producers indicate they will resort to investing abroad rather than discount further if production costs continue to rise in the U.S.

Effect on investment

The expectation of higher steel costs as a result of the steel restraints has already begun to affect the investment decisions of some of the largest domestic construction equipment manufacturers. Construction machinery manufacturers are shifting more of their production overseas in order to have access to lower-priced steel which other foreign equipment producers can already utilize. Although lower labor costs and the strength of the dollar are contributing factors in their decision to increase outsourcing, industry officials note that the prospects of high steel prices has also been a significant planning factor. [** ** ** ** ** ** ** **] By the end of 1985, approximately 55,000 tons of steel purchases will have shifted from the United States to European steel mills as a result of increased investment abroad. Over 1,000 jobs in the United States and an additional 2,000 jobs at U.S. suppliers have already been lost due to these changes in production sourcing. 1/

Pipes and Tubes Industry: An Overview

Description and uses

Steel pipes and tubes typically are produced with a circular, square, or rectangular cross section and can be divided into two general categories on the basis of method of manufacture--seamless or welded. 2/ Seamless pipes and tubes are produced from round billets by either rotary piercing and rolling or by extrusion. Welded pipes and tubes are typically made by cold-forming or hot-forming plates, sheets, or strip with a series of forming rollers that shape them into cylindrical forms. If cold formed, the seam is welded either by connecting the cylinder edges using molten metal from a welding rod (as in the submerged-arc-weld process) or by heating the cylinder edges to a very high heat with an electric resistance welder and forcing the edges together under pressure. Hot-formed cylinders are typically made from a continuous (or butt-weld) process whereby flat-rolled sheets are welded end to end, heated in

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1/ Prehearing brief submitted by Catepillar Tractor Co. in conjunction with USITC Investigation No. 332-214, September 23, 1985.

2/ The terms "pipes," "tubes," and "tubular products" are generally used interchangeably. In some industry publications, however, a distinction is made between pipes and tubes. According to these sources, pipes are produced in large quantities to a few standard sizes, whereas tubes are made to customers' specifications for dimensions, finish, chemical composition, and mechanical properties.

a furnace, and passed through rollers that shape the cylinders and press the hot edges together, forming the weld. However formed, pipes and tubes may be further advanced by such processes as annealing to reduce brittleness, cold drawing to a variety of shapes, surface finishing of both the inside and outside surfaces, and threading.

Carbon and alloy (other than stainless) steel pipes and tubes have a number of end-uses. Standard pipe are intended for low-pressure conveyance of water, steam, air, natural gas, and other liquids and gases in plumbing and heating systems, air-conditioning units, automatic sprinkler systems, and other related uses. These pipes may carry fluids at elevated temperatures and pressures and may not be subjected to the application of external heat. Pressure tubes are used to convey fluids and gases at elevated temperatures or pressures, or both, and may be subjected to the application of heat. These tubes include air-heater tubes, boiler tubes, heat exchanger and condenser tubes, and superheater tubes. Mechanical tubing is employed in a variety of mechanical applications, including bicycle and motorcycle frames and parts, conveyor rolls and links, fishing rods, flagstaffs and masts, furniture tubing, gun barrels, handles, muffler tubes, posts and poles, and vacuum cleaner parts. Structural pipes and tubing are used as framing and support members for construction or load-bearing purposes in the construction, shipbuilding, trucking, farm equipment, and related industries. Oil country tubular goods are steel pipes and tubes used in the drilling of oil and gas wells and in conveying oil and gas to ground level. Included therein are oil well drill pipe, oil well casing, and oil well tubing. Line pipes are used for the transportation of gas, oil, or water, generally in pipeline or utility distribution systems.

Steel pipes and tubes are generally produced according to standards and specifications published by a number of organizations, including the American Society for Testing and Materials; the American Society of Mechanical Engineers; and the American Petroleum Institute. Comparable organizations in Japan, West Germany, the United Kingdom, and other countries have also developed standard specifications for steel pipes and tubes.

Industry profile

About 140 companies produced steel pipes and tubes in the United States during 1980-84. These manufacturers included the major steel producers, which maintain multiplant facilities and typically produce most or all of the six pipe and tube product groups mentioned previously; smaller steel producers, which concentrate on the production of certain categories of pipes and tubes; and nonproducers of iron or steel, which fabricate or finish pipe and tube products from purchased steel. This latter group of producers is the one which would be most affected by the VRA's, as companies in this group purchase a variety of domestic and imported steel products for fabrication; these purchases include, plate and sheet (to be welded into pipe), green tubes (to be finished into oil country tubular goods), and finished tubes (to be coated with plastic). Of the 140 pipe producers with shipments of $100,000 or more, about 120 companies are fabricators; in recent years they have accounted for about 47 percent of domestic pipe and tube production. Pipe facilities are located throughout the United States, with Pennsylvania, Ohio, California, Michigan, and Illinois accounting for the bulk of production.

U.S. market

After rising to 18.3 million tons in 1981, domestic consumption declined 57 percent to 7.8 million short tons in 1983 before increasing to 12.0 million short tons in 1984. Consumption during January-June 1985 was down 10 percent compared with that in 1984 (Table 23). Post 1981 production has been lower than previous years because of decreased activity in the manufacturing and energy sectors. Oil country tubular goods were the predominant type of pipes

Table 23.--Carbon and alloy steel pipes and tubes: U.S. producers' shipments, exports of domestic merchandise, imports for consumption, and apparent consumption, 1980-84, January-September 1984, and January-September 1985

					Ratio of--	
	Shipments	Exports	Imports	Apparent consumption	Imports to consumption	Exports to shipments
	1,000 short tons				Percent	
1980	10,807	456	3,753	14,104	26.6	4.2
1981	12,184	461	6,537	18,260	35.8	3.8
1982	7,016	419	5,227	11,824	44.2	6.0
1983	5,255	252	2,843	7,846	36.2	4.8
1984	1/ 6,790	200	5,389	11,979	45.0	2.9
Jan.-Sept.--						
1984	1/ 5,184	152	4,171	9,203	45.3	2.9
1985	1/ 4,839	159	3,593	8,273	43.4	3.3

1/ Estimated by the staff of the U.S. International Trade Commission.

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

and tubes consumed in the United States during the period. The share of U.S. consumption represented by imports increased from 26.6 percent in 1980 to 45.0 percent in 1984 (on the basis of quantity), and exports as a share of shipments fluctuated between 2.9 and 6.0 percent.

U.S. exports remained steady during 1980 and 1981, and then declined by 57 percent during 1982-84 to 200,000 short tons in 1984 primarily because of reduced activity in foreign oil and gas projects. Exports consisted primarily of standard pipes and oil country tubular goods during 1980-84 (table 24). Exports of mechanical tubes remained relatively steady during 1980-84 and have been increasing as a share of total pipes and tubes exports. Canada, Mexico and Saudi Arabia were the principal export markets during this period (table 25).

Table 24.--Carbon and alloy steel pipes and tubes, U.S. exports of domestic merchandise by type, 1980-84, January-September 1984, and January-September 1985

(In thousands of short tons)

	1980	1981	1982	1983	1984	Jan.-Sept.--	
						1984	1985
Oil country tubular goods	134	128	153	61	53	37	53
Mechanical tubing	42	44	34	41	45	35	30
Standard pipe	118	119	73	50	23	17	17
Line pipe	41	48	48	25	18	11	9
Structural tubing	4	5	4	6	7	6	4
Pressure tubing	19	16	12	6	5	4	5
Other pipe and tubing	98	102	94	63	48	41	40
Total	456	460	419	252	200	152	159

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

Table 25.--Carbon and alloy steel pipes and tubes, U.S. exports of domestic merchandise by principal markets, 1980-84, January-September 1984, and January-September 1985

Commodity/Country	1980	1981	1982	1983	1984	Jan.-Sept.--	
						1984	1985
	Quantity in short tons						
Canada	86	84	73	77	66	52	49
Mexico	105	118	58	27	33	27	27
Saudi Arabia	37	36	67	40	18	16	5
Egypt	4	8	14	13	10	8	10
Colombia	8	11	10	5	9	4	8
Angola	19	8	4	3	6	4	13
United Kingdom	10	11	10	4	6	5	2
Nigeria	21	19	6	1	4	2	3
Australia	5	5	4	3	3	3	2
Peru	10	15	7	5	3	2	1
All other	151	146	164	72	42	29	39
All countries	456	461	419	252	200	152	159
	F.a.s. value, in million of dollars						
Canada	109	128	115	99	89	70	65
Mexico	127	172	85	45	53	45	26
Saudi Arabia	55	61	102	66	26	24	7
Egypt	5	13	17	17	9	7	9
Colombia	11	17	22	5	10	5	8
Angola	10	9	11	2	6	4	14
United Kingdom	19	25	22	11	14	11	5
Nigeria	26	22	14	3	4	2	7
Australia	10	9	10	5	5	4	3
Peru	11	25	13	6	5	2	1
All other	279	302	325	115	80	60	68
All countries	663	783	736	373	302	234	213

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

Even prior to the implementation of the VRA's, U.S. pipe and tube products were generally not highly competitive in the world market and only a small number of U.S. companies were exporting their products. The largest exporters are believed to have been steel fabricators, which are estimated to have accounted for about three-quarters of pipe and tube exports in 1984. Most regions of the world have local pipe and tube manufacturers that can supply products. Given the significant freight expenses associated with pipes and tubes, the proximity of local supplies of these low-value-added items makes it difficult for most U.S. or third country firms to penetrate these foreign markets.

The only U.S. pipes and tubes that are competitive in the world market are those that are specialized or high-value-added or those destined for AID projects or energy or water equipment designed with U.S. specifications. With these types of products, the U.S. enjoys a reputation throughout the world as a high-quality producer, and foreign consumers will generally purchase U.S. manufactured pipes and tubes as long as the prices are comparable with those of other countries.

Pipes and Tubes Industry: Effects of the VRA's

Effect on the costs of production

The sheet, plates, green tubes, and finished tubes that domestic fabricators and finishers use as raw materials in the production of pipes and tubes, are subject to import restraints. The U.S.-EC Arrangement and subsequent VRA's have generally had little effect on pipe and tube exports because of the low level of U.S. participation in the foreign markets for standard items prior to the import agreements. However, import restrictions have hindered the export of some specialty and highly-engineered pipes and tubes. Since the introduction of steel quotas, several U.S. manufacturers have lost large export orders for specialty pipes and tubes because they could not be competitively priced without the use of foreign basic steel. 1/

Prior to the introduction of the VRA's, foreign steel was sold in the U.S. at two prices; the domestic price for U.S. products and the lower international price for imports. The steel quotas have not only raised the prices of imported products to just below the U.S. prices, they have allowed the U.S. prices to increase. The imort restraints have greatly curtailed the availability of internationally priced steel in the United States.

Supplies of competitively priced basic steel for pipe and tube manufacture are further restricted, because foreign producers covered by VRA's are tending to ship the highest-valued product possible within each quota category. 2/ The steel products used in pipe fabrication, which in unrestricted markets are typically in the low price range of the U.S. quota groups, are unavailable to U.S. pipemakers except at prices comparable to those of the high-valued products of each category.

1/ Prehearing brief on behalf of Berg Steel Pipe Corporation and Evans Cooperage Co., Inc. p. 16.

2/ Tr. at p. 73.

With the higher prices of steel raw materials, some U.S. pipe and tube manufacturers have found that they cannot be competitive in the world market. These fabricators are located in the southeast and the west, where domestic steel products are particularly expensive owing to the costly freight charges added to the already high prices. Now that the prices of imports reflect those of the expensive domestic steel, the pipe and tube manufacturers are having difficulties remaining competitive. One other tube manufacturer indicated that its exports were not doing well, principally because of declining demand and the construction of a new tube mill in its primary foreign market, Saudi Arabia. This fabricator, located near the major steel producers in the midwest, uses only domestic products for its steel raw materials and feels it would be competitive if not for the new plant in its major market.

Effect on exports

Industry sources estimate that the VRA's have increased the price of steel used in pipe and tube manufacture approximately 20 percent. Since basic steel accounts for 60 to 80 percent of the cost of the finished pipes and tubes, the cost of producing tubular products has increased 12 to 16 percent with the implementation of import restrictions. 1/

The production cost increases caused by the VRA's have resulted in the losses of a number of large export orders.. One firm cites the losses of two contracts worth $6.9 million, of which 57 percent was value added in the United States, resulting from the unavailability of competitively priced raw materials. 2/ Though the quality of U.S. products is excellent and they are qualified for use in many overseas projects, they cannot be sold at competitive prices. These markets are being lost to similar quality European and Japanese products.

Effect on investment

The loss in competitiveness experienced by some U.S. pipe and tube fabricators and finishers is not likely to have a favorable affect on the investment in this industry. While none of the firms contacted have imminent plans to move their facilities abroad, several indicated that they would consider moving offshore if their competitiveness cannot be improved. Steps to improve their market position would probably include reduced production and employment in the United States, but not the closure of existing facilities. One firm, which is partially foreign-owned, stated that they have no plans to relocate but that further investment in the United States by their foreign owners is not likely.

1/ Transcript p. 14 and 86.
2/ Testimony Synopsis of United Casing Inc.

Steel Shipping Drums and Barrels Industry: An Overview

Description and uses

Steel shipping drums and barrels are principally used in the packing, transporting, and marketing of goods. 1/2/ Drums range in capacity from 12 gallons to 132 gallons, with the most prevalent sizes being 15-, 30-, and 55-gallons.

The drums are made from lengths of steel sheets which may be pre-coated with a metalworking fluid for rust protection and for ease of working. The sheets are cut to size and rolled into shells which are welded together at the side seams. Ridges in the drum body, known as rolling hoops, are generally formed. Container heads and bottoms are usually stamped from steel coils, and flange holes are punched to permit the attachment of fittings (the device through which the drum is filled and emptied). Certain coatings and linings may be applied to the container components, depending on intended use. Container bodies and ends are then joined in an automated seamer that rapidly rolls the edges together. A major technological advance in the joining operation is the triple seam chime which involves rolling together the head and body of the drum in three folds rather than two. The final step in container production is the painting of the exterior. 3/

Most drums undergo some sort of reconditioning process after having been emptied. During this process, residues are removed and drums are cleaned, making them suitable for further use. Total drum life is largely determined by the drum's gauge (i.e., the steel sheet's thickness). On average, a drum can undergo from 8 to 18 reconditioning operations.

Industry profile

There are approximately 45 U.S. companies that produce steel shipping drums, operating about 80 plants. 4/ The companies which comprise the industry are typically involved only in pail and drum production, although

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1/ The steel shipping containers covered in this report are included in Standard Industrial Classification (SIC) category 3412, Metal Barrels, Drums, and Pails. Shipments of steel shipping barrels and drums account for approximately 60 percent of total shipments in SIC 3412.

2/ The term barrel, which historically referred to wooden barrels, has been largely replaced by the term drum. For the remainder of this discussion, reference to drums will include both steel drums and steel barrels.

3/ "Special Report on Drums," The Oil Daily, November 9, 1984.

4/ "Special Report on Drums," The Oil Daily, July 17, 1985.

they may make products of related configuration such as trash cans. Steel producers, which formerly produced these containers, have withdrawn from the market. Manufacturers of the drums are located throughout the United States, with significant concentrations in Ohio, New Jersey, California, Illinois, and Texas. Employment of production and related workers in the industry decreased during 1980-84, declining 8 percent to an estimated 9,700 workers in 1984. 1/

According to industry sources, the composition of the steel shipping drum industry has changed over the past few years. Since 1977, 16 plants have been closed, while an almost equal number of plants, or new lines in existing plants, have been added. This restructuring has resulted in only a slight reduction in total industry manufacturing capacity, although over capacity is said to exist. 2/

Annual company sales in the steel shipping container industry range from $3 million to $100 million. An economic survey of the industry conducted by the Steel Shipping Container Institute indicated an improvement in profits as a share of sales and investment for 1984 as compared to the previous year. However, a number of companies were only marginally profitable, and some recorded losses. 3/

U.S. Market

Apparent consumption of steel shipping drums fluctuated during 1980-84, declining overall, from 46.1 million units ($637.7 million) in 1980 to 37.3 million units ($581.9 million) in 1984, a decline of 19 percent (table 26). The decline reflects a downturn in demand from the major consuming industries for these containers, the shippers of chemicals (particularly petroleum and petrochemicals), oils, paints, coatings, foodstuffs, printing fluids, and janitorial supplies. U.S. producers' shipments also fell during 1980-84, but the decline was less pronounced than that in demand (i.e., only 9 percent), as imports fell sharply in 1983 and 1984, more than compensating for a 1984 decline in exports.

With respect to foreign trade, U.S. exports of the shipping drums rose 32 percent during 1980-83, reaching 1.5 million units ($13.2 million) in 1983, before falling 61 percent to 585,000 units ($10.3 million) in 1984. During January-August 1985 exports more than doubled over those in the same period of 1984. Imports of the drums fell by 93 percent during 1980-84, from 6.1 million units ($1.8 million) in 1980 to 404,000 units ($4.5 million) in 1984, and show further signs of declining in 1985 (based on January-August data).

1/ U.S. Department of Labor, Bureau of Labor Statistics, Employment and Earnings, 1981-85, March issues.

2/ The Oil Daily, op. cit., July 17, 1985, p. B-3, p. B-8.

3/ The Oil Daily, op. cit., July 17, 1985, p. B-3.

Table 26.--Steel shipping drums 1/: U.S. producers' shipments, exports of domestic merchandise, imports for consumption, and apparent consumption, 1980-84, January-August 1984, and January-August 1985

(Quantity in thousands of units; value in thousands of dollars)

	U.S. producers' shipments	Exports	Imports	Apparent consumption	Ratio (percent) of: Imports to consumption	Ratio (percent) of: Exports to shipments
	Quantity					
1980	41,080	1,138	6,131	46,073	13.3	2.8
1981	38,492	652	3,119	40,959	7.6	1.7
1982	32,857	1,032	8,306	40,131	20.7	3.1
1983	34,148	1,497	827	33,478	2.5	4.4
1984	37,455	2/ 585	404	37,274	1.1	1.6
Jan.-Aug---						
1984	3/	2/ 450	276	3/	3/	3/
1985	3/	1,142	219	3/	3/	3/
	Value					
1980	644,384	8,480	1,819	637,723	0.3	1.3
1981	629,799	8,630	2,753	623,922	0.4	1.4
1982	578,508	14,048	2,720	567,180	0.5	2.4
1983	555,174	13,243	3,331	545,262	0.6	2.4
1984	587,744	2/ 10,297	4,501	581,948	0.8	1.8
Jan.-Aug---						
1984	3/	2/ 7,213	2,981	3/	3/	3/
1985	3/	6,687	2,990	3/	3/	3/

1/ Data are not believed to include reconditioned drums.
2/ Estimated by the staff of the U.S. International Trade Commission.
3/ Not available.

Source: Producers' shipments, exports, and imports compiled from official statistics of the U.S. Department of Commerce, except as noted.

The ratio of imports to consumption dropped from 13.3 percent in 1980 to 1.1 percent in 1984, while the ratio of exports to shipments rose from 2.8 percent to 4.4 percent during 1980-83, then declined to 1.6 percent in 1984.

Drum manufacturers produce only for order, as the cost of maintaining drum inventories is high. Recently, producers have experienced reduced customer orders, the effect of which has been decreased production efficiency resulting from frequent retooling and changes in the scale of operations. Such adjustments have tended to increase overall production costs.

Transportation costs for drums are based on container volume, which makes them costly to ship. Consequently, drum transportation is generally limited to areas within a few hundred miles of the manufacturing plant. The standard order size is for a truckload quantity (ranging from about 264 containers to 400 containers per truck). Recent developments in drum manufacture, however, permit the shipment of drums in knock-down form; once the drum body has been formed into a cyclinder it is crushed down (the two inside walls are pushed together) and fitted into an uncrushed cylinder. This process is continued until the uncrushed cylinder contains 15 to 18 crushed drum bodies, occupying the space of only one drum. The drum ends are shipped along with the bodies to an assembly plant which assembles the drums and typically sells them in a local market. 1/ Transportation costs for the nested drums are significantly less expensive, and are based on drum weight rather than volume. Use of the knock-down process gives drum manufacturers the potential to expand the geographic extent of their markets.

The steel drum market has changed over the past 5 years as customers are doing more "just in time" ordering in an attempt to maintain smaller inventories. Lead times have been shortened accordingly, causing producers to maintain (and finance) greater stocks of coiled sheets so as to respond rapidly to customer demand.

Steel drum manufacturers are facing a growing challenge from other competitive containers including, fiber drums, containers known as "bag in a box," plastic drums, and containerized trucks. Fiber drums have been a competitive factor for 35 years, during which they have taken a significant share of the market for packaging dried and granular products; moreover, they are now being used to some extent for liquid and hazardous materials packaging. The "bag in a box" consists of a large plastic bag inside a wooden frame which can be folded for return shipment to the filler. Over the last few years, the bag in a box has made some headway in the food industry, particularly with tomato paste processors who formerly packaged in steel drums. Plastic drums are believed to account for 5 percent to 10 percent of the drum market. The primary user of all-plastic drums in the United States is the chemical industry, which is also the principal user of the steel drums. In addition to competitive materials, the industry is facing competition from containerized trucks, which are used to haul large volumes of merchandise.

As indicated in table 26, the United States shifted from being a net importer to a net exporter of drums during 1980-84. The Netherlands was the major foreign market for drums during the period, followed by Canada and Mexico (table 27).

1/ Transcript of the Commission hearing at p. 49.

Table 27.--Steel shipping drums: U.S. exports by principal markets, 1980-84, January-August 1984, January-August 1985

(Quantity in thousands of units; value in thousands of dollars)

Market	1980	1981	1982	1983	1984	January-August	
						1984	1985
	Quantity						
Netherlands	637	179	306	208	193	148	206
Canada	117	172	127	157	128	96	52
Mexico	106	107	119	61	74	60	269
Honduras	82	64	233	35	47	31	105
Panama	22	28	46	65	39	32	241
French Pacific Islands	10	15	6	12	33	30	3
West Germany	10	2	5	12	11	5	14
New Zealand	0	1/	1/	1/	3	1	0
All other	154	85	187	947	2/ 58	2/ 48	251
Total	1,138	652	1,032	1,497	2/ 585	2/ 450	1,142
	Value						
Netherlands	1,812	1,758	2,962	3,622	4,634	3,047	2,562
Canada	933	1,795	1,506	1,445	1,539	1,141	723
Mexico	2,026	1,851	2,536	1,353	1,286	1,168	456
Honduras	936	1,118	1,179	650	902	548	531
Panama	598	627	860	1,106	736	571	806
French Pacific Islands	183	150	128	208	209	155	55
West Germany	235	62	153	218	184	73	541
New Zealand	0	3	12	6	173	60	0
All other	1,757	1,266	4,714	4,634	2/ 634	2/ 448	1,012
Total	8,480	8,630	14,048	13,243	2/ 10,297	2/ 7,213	6,687

1/ Less than 500.
2/ Estimated by the staff of the U.S. International Trade Commission.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Transportation of steel shipping drums is costly because freight rates are based on container size, and the drums tend to be bulky items. Consequently, a significant share (15-43 percent) of the U.S. trade during 1980-84 was with the two contiguous countries of Canada and Mexico.

Steel Shipping Drums and Barrels Industry: Effect of the VRA's

Effect on the costs of production

Industry sources indicate that raw material shortages have not yet been experienced by container producers and that lead times for steel procurement remain unchanged. The effects of the import restraints are expected to be more pronounced in early 1986, in the form of limited steel availability and price increases. As an example of this, it was noted that the U.S.-EC Arrangement had resulted in a reluctance by certain non-EC countries to sell in the United States, as they feared trade actions might eventually be taken, involving their exports.

It appears that import restraints (both the U.S.-EC Arrangement and the more recently negotiated agreements) have resulted in increased use of domestic steel. Reasons for such a shift include anticipated increases in the price of foreign steel, and the need to establish U.S. sources of steel supply, should foreign steel be unavailable. In one instance, the shift to domestic steel affected a company's ability to obtain steel of acceptable quality, resulting in an interruption in drum production. In general, steel purchasing decisions are based on price, quality, and service, in that order.

Steel sheets are the only basic steel mill products used in the production of shipping drums. Data developed with the use of the input/output model regarding direct steel requirements of companies which produce metal barrels and drums indicate that the value of steel purchases accounted for approximately 38 percent ($353 million) of the value of final product sales in 1982. The data include all operations of the companies, however, and, therefore are not necessarily indicative of average use. Industry sources have estimated that the cost of steel is at least half the cost of drum production and perhaps as much as 65 percent. 1/ Steel prices thus have a significant impact on container production costs.

One domestic drum producer indicated that its ability to buy imported cold-rolled sheet for fabrication and export as drums has been hindered by price increases resulting from both the U.S.-EC Arrangement and the recent import restraint agreements. 2/ The company compared price quotes for steel purchased in the U.S. market with quotes for steel purchased outside the United States and determined that prices for unrestricted steel outside the United States were 18 to 20 percent lower than the prices they are presently being quoted from both domestic sources and foreign sources. 3/ Based on the steel usage rates cited above, an 18 to 20 percent disparity in steel prices would translate into a production cost difference of 9 to 13 percent. Another concern expressed by the company is the October 1985 announcement by domestic

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1/ 1982 Census of Manufactures, op. cit., and The Oil Daily, op. cit., November 1984, p. C-3.

2/ Tr. at p. 19.

3/ Ibid., at p. 31.

steel suppliers of price increases effective at the beginning of 1986, and the resultant revocation of quotes it had received for cold-rolled sheets at lower prices. 1/

Effect on exports

U.S. exports of empty steel drums are highly price sensitive; countries secure export business by supplying drums at the lowest price. If more than one country offers a competitive price, the purchase decision is based on product quality and service. An increase in the cost of steel would likely cause exporters of empty drums to lose competitiveness in foreign markets.

The export of empty drums is only one of the industry's concerns, with the export of filled drums of more consequence as they may account for over 95 percent of total exports. The effect of the import restraints on exports of the filled drums depends on a number of factors, including the share of the drum's value in the total value of the export, and the price sensitivity of the "filler".

Industry sources indicate that drum cost represents a variable portion of the total cost of the packaged product, ranging from 13 to 20 percent. Information obtained from certain exporters of products such as vegetable oil and chemicals, which are shipped overseas in steel drums, indicates that rising costs for drums would likely result in a higher total cost for supplying a commodity to an overseas market, causing the commodity to lose competitiveness in the foreign market.

U.S. exports of filled drums are to markets throughout the world although there is some concentration of export shipments from the Gulf Coast to Central America and South America. It is believed that there is a significant degree of competition in U.S. export markets for filled drums from France, West Germany, and Japan.

Another factor which affects U.S. competitiveness in foreign markets is the strong dollar. Industry sources have indicated that the recent high value of the dollar, with respect to foreign currencies, has had an adverse effect on their ability to compete in foreign markets by raising the relative costs of their products.

Effect on investment

A major drum exporter has indicated that it recently considered investing in a knock-down drum operation in Mexico in order to increase its competitiveness in both foreign and domestic markets. The company decided against the investment principally because of the poor quality of Mexican steel from which the drum components would be produced. However, the firm stated that it had also been approached by some Japanese trading companies to build a plant to manufacture knock-down drum parts in China. This proposal has not yet been seriously considered, but the company indicated that this type of foreign investment would become more realistic should business

1/ Ibid., at p. 22.

continue to decline. 1/ The effect of such investment on the firm's U.S. operations would likely be the conversion of drum production lines to assembly plants for the knock-down drum components.

THE REEXPORT PROVISIONS

The firms participating in this investigation have expressed considerable dissatisfaction with the substance and administration of the reexport provisions contained in the bilateral agreements imposing restraints on imported steel. They have submitted several proposals to alter the terms of the agreements, or their administration by the participating governments, or both. This section examines those concerns and proposals in greater detail and attempts some assessment of their impact on the agreements and their administration in the United States.

The reexport provisions governing imported steel are understood to exist in several (mostly unpublished) bilateral agreements negotiated between the United States and various foreign governments. One arrangement was concluded with the EC on October 21, 1982, covering exports of certain carbon steel products. A second arrangement 2/ with the EC (same date) covering exports of steel pipes and tubes has also been reported. 3/ On January 7, 1985, an arrangement covering pipes and tubes was published by the EC effective from

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1/ Op. cit., Tr. at pp. 61-62.

2/ The domestic legal status and substantive provisions of this second arrangement are unclear. An "Arrangement on ... Pipes and Tubes" dated October 21, 1982, is cited as one basis for a delegation of authority to the Secretary of Commerce to take various enforcement actions in section 805(b) of the Trade and Tariff Act of 1984. However, the substance of its provisions is not further identified. The 1982 US-EC pipe and tube arrangement, to our knowledge, has never been published by the United States or by the EC.

3/ The EC clearly has taken a different view of the legal status and substantive obligations, if any, imposed by this second arrangement. For example, it published the arrangement of Aug. 5, 1985, (covering certain "consultation products") as an arrangement "complementary" to the 1982 US-EC carbon steel arrangement. By contrast, the pipe and tube arrangement of January 7, 1985, is set forth in the Official Journal of the EC omitting any reference to a prior arrangement covering these products.

January 1, 1985. 1/ And on August 5, 1985, an arrangement covering "consultation" products was published by the EC.

Numerous bilateral agreements have also been reported with respect to exporting countries other than EC countries (e.g., Japan) but nonconfidential versions of these agreements are not available. 2/ These arrangements have not been published by the United States despite apparent international obligations in this respect, 3/ and, possibly, despite certain domestic statutory requirements. 4/ The text of the reexport provisions which have

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1/ The Court of International Trade has characterized the 1985 arrangement as an "international agreement . . . clarifying" the 1982 U.S.-EC pipe and tube arrangement. Sacilor, et al v. United States, (Slip Op. 85-66; June 21, 1985) in 19 Cust. Bull. (No. 30) 3 at 4, 6.

2/ The Commission has requested that nonconfidential versions of these "surge control" arrangements be made available but, to date, they have not been received.

3/ Article X of the General Agreement on Tariffs and Trade (the GATT) provides in part--

> Agreements affecting international trade policy which are in force between the government or a governmental agency of any contracting party and the government or governmental agency of any other contracting party shall also be published. ... No measure ... imposing a new or more burdensome ... restriction ... on imports ... shall be enforced before such measure has been officially published.

And see, Jackson, World Trade and the Law of GATT, section 17.7.

4/ Statutory requirements are not entirely clear. See, for example, 5 U.S.C. 552(a)(1)(D). Also, 1 U.S.C. 112b provides in part--

> Any department or agency of the United States Government which enters into any international agreement on behalf of the United States shall transmit to the Department of State [for publication] the text of such agreement not later than twenty days after such agreement has been signed. ... The Secretary of State shall determine for and within the executive branch whether an arrangement constitutes an international agreement within the meaning of this section.

However, the implementing regulations state that "the parties must intend their undertaking to be governed by international law" if it is to be subject to the publication requirement. 22 C.F.R. 181.2(a)(1) Note that the exchange of letters transmitting the 1982 US-EC carbon steel arrangement state that "This Arrangement is entered into without prejudice to the rights of the US Government and of the EC under GATT." 25 O.J. EUR. COMM. (No. L 307) 12 (1982).

been published by the EC (as "Acts whose publication is obligatory") are set

out in appendix J. The following analysis is based on these texts, although the texts of reexport provisions contained in the recent "surge control" arrangements are probably similar. 1/

U.S. International Obligations

> Article 4(b) of the 1982 US-EC carbon steel arrangement provides: Where Arrangement products imported into the USA are subsequently re-exported therefrom, without having been subject to substantial transformation, the export ceiling for such products for the period corresponding to the time of such re-export shall be increased by the same amount. (Emphasis supplied.)

Under this provision, steel imported subject to quota ("quota steel") is divided into two classes for purposes of Article 4(b) (the "re-export credit" provision): (1) steel substantially transformed 2/ in the United States into another product such as steel drums, steel pipe, or steel earthmoving equipment; and (2) steel which remains "in the same state" 3/ or is not substantially transformed while in the United States. Where products that are

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1/ Prehearing Brief on behalf of Berg Steel Pipe Corp. and Evans Cooperage Co. (hereinafter "Prehearing Brief: Berg/Evans") at 6.

2/ The concept of "substantial transformation" in customs law may be fairly characterized as a "mixed question of fact and law, dependent in large part on the details of a particular case". Prehearing Brief: Berg/Evans at 19. The concept is most often encountered in determining the country of origin of imported articles. See generally, U.S. INT'L TRADE COMM'N, PUB. NO. 1695, The Impact of Rules of Origin on U.S. Imports and Exports (1985). Quota steel would be considered to have undergone a substantial transformation in the United States if the product exported from the United States is a new and different article of commerce; i.e., it must have a name, character, or use that is distinct from that of the imported steel incorporated therein, although that alone does not control the outcome. Similarly, a change in tariff classification which results from the U.S. processing, while of some evidentiary value, is not determinative of whether substantial transformation will be deemed to have occurred. In general, there must be a material change in the imported steel for substantial transformation to occur.

3/ Article 6, COMMISSION DECISION No 2304/85/ECSC of 9 August 1985 on the restriction of exports of certain steel products to the United States of America, 28 O.J. EUR. COMM. (No. L 215) 33 (1985).

manufactured from quota steel are exported from the United States, the reexport credit may not be used to restore the quota to the level that existed prior to importation of that steel. On the other hand, if the quota steel has not been substantially transformed while in the United States, the credit may be used to restore the quota to the level that existed prior to importation. Thus, the reexport credit provision clearly favors "pass through" transactions, or mere transshipments, over substantial manufacturing activity performed in the United States.

The published agreements are very precise in their treatment of U.S. and EC obligations. The United States shall prohibit the entry of quota steel that is not accompanied by an export certificate. 1/ The EC will require that exports of quota steel destined for the United States be accompanied by a certificate endorsed in relation to an export license. 2/ The EC, of course, may not license exports in excess of the agreed ceilings.

Language that appears to be the functional equivalent of a "most-favored-nation" (MFN) provision is understood to exist in at least some of the bilateral agreements. For example, section 11 of the 1985 US-EC pipe and tube arrangement provides in part--

> If an arrangement with a third country which is a major exporter of pipe and tube products to the USA provides for more favorable terms than those defined in this Arrangement, in particular in relation to market share and duration, the EEC may request consultations with the US. 3/

The effect of the MFN language is that any change in the reexport credit provision will probably reverberate throughout the entire network of bilateral arrangements.

U.S. Domestic Implementation

The President is authorized by section 805 of the Trade and Tariff Act of 1984 (19 U.S.C. 2253 note) to enter into such bilateral arrangements and to enforce these arrangements through the customs entry process. Prior to enactment of section 805, the President's authority to deny entry to ex-quota steel mill products was limited to those international arrangements that resulted in a request by the President and by a foreign government to the

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1/ See, for example, art. 6(b) of the 1982 US-EC carbon steel Arrangement and sec. 7 of the 1985 US-EC pipe and tube Arrangement.

2/ Ibid.

3/ Arrangement in the form of an exchange of letters between the European Communities and the United States concerning trade in steel pipes and tubes, 28 O.J. EUR. COMM. (No. L 9) 7 (1985).

Secretary of the Treasury made before January 1, 1983. 1/ At least one such request was made by the President and the EC to enforce the 1982 arrangement. This request resulted in an agreement between the Secretary of the Treasury and the Secretary of Commerce that products subject to export licensing would require certain documentation (including a Special Steel Summary Invoice and an "essentially correct" export certificate issued by EC member state customs officials against an EC export license) as a condition of entry into the United States. 2/

Reexports of imported steel have also been addressed in the context of previous restraint programs such as the Trigger Price Mechanism (TPM). The TPM was originally adopted in early 1978 as an administrative mechanism to enforce the antidumping and countervailing duty laws without relying solely upon suits initiated by private parties. 3/ Under the TPM, steel entered under drawback or the Temporary Importation Bond (TIB) procedures, and certain steel admitted into foreign trade zones, were exempt from the TPM monitoring requirements. 4/ However, steel admitted into a zone to be "transformed and ... subsequently entered for consumption in the United States" was subject to TPM monitoring. If steel priced below the applicable trigger price was withdrawn from the zone for exportation, any pricing inquiry would be terminated. A similar result obtained when such steel was entered into a customs bonded warehouse and subsequently withdrawn for exportation.

The question of whether quota steel has been substantially transformed and, thus, not qualified for the reexport credit is determined by the Office of Rulings and Regulations of the U.S. Customs Service. 5/ The Department of Commerce which administers the steel import restraint program generally defers to the Customs Service on this issue since the concept of substantial transformation is one that arises in numerous customs procedures. 6/ Several rulings addressing the question of substantial transformation have been requested 7/ or have already been issued. 8/

1/ Sec. 626 of the Tariff Act of 1930 (19 U.S.C. 1626), as added by sec. 153 of Public Law No. 97-276, Oct. 2, 1982.

2/ T.D. 83-30, 17 Cust. Bull. 66-70 (1983).

3/ See generally, Steel Trigger Price Mechanism Procedures Manual, 46 F.R. 49928 (1981).

4/ Id. at sections 1, 6. Statement on behalf of Berg Steel Pipe Corp. and Evans Cooperage Co., Transcript at 12-13, 32-33; Letter from the Department of Commerce to Evans Cooperage Co., dated Jan. 30, 1981.

5/ Conversation with staff of the U.S. Customs Service, Oct. 17, 1985.

6/ Conversation with staff of the Department of Commerce, Oct. 30, 1985.

7/ U.S. Customs Service, File No. 076201.

8/ U.S. Customs Service, File Nos. 075174, 553739.

Alternative Methods of Implementation

Several proposals to liberalize the reexport credit provision were submitted. These may be categorized briefly as follows:

(a) Allow substantially transformed quota steel to qualify for the reexport credit (the Berg Steel/Evans Cooperage proposal);

(b) Allow substantially transformed quota steel to qualify for the reexport credit and increase the flexibility of the reexport credit by incorporating a "substitution" concept similar to that employed in the duty drawback statute (the Caterpillar Tractor proposal); and

(c) Allow substantially transformed quota steel to qualify for the reexport credit and/or create an "export accounting system" that completely exempts quota steel intended for reexport from the quota and require a bond of 200 percent of the value of the imported steel pursuant to the TIB customs procedure (the Tooltech/United Casing proposal).

In addition to the proposals outlined above, all parties represented at the hearing commented unfavorably upon the exclusion of foreign trade zone processing from the reexport credit provisions. 1/ The bilateral arrangements available for examination treat foreign trade zones, contrary to the usual customs practice, as part of the customs territory of the United States. 2/ This treatment negates the basic thrust of foreign trade zone legislation, 3/ at least in so far as processing in the zone is intended for export markets. Moreover, the policy choices incorporated in the re-export credit provisions appear in basic conflict with respect to virtually all components of the "temporary entry system"; 4/ i.e., drawback, customs bonded warehouses, temporary importation bonds, and foreign trade zones.

The Berg Steel/Evans Cooperage proposal is, perhaps, the most modest of the three proposals in so far as it would expand the reexport credit without significant impact on present customs procedures. Although referred to as a "quota drawback" proposal, 5/ it would not appear to require customs procedures

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1/ Statement on behalf of Tooltech, Inc., Transcript at 87-8; Statement on behalf of Caterpillar Tractor Co., Transcript at 89, 98-9; Prehearing Brief: Berg/Evans at 25-6; Prehearing Brief on behalf of Caterpillar Tractor Co. at 11.

2/ Article 4(c) of the 1982 US-EC carbon steel arrangement is probably representative of similar provisions in recent bilateral arrangements--

> For purposes of this Arrangement, the USA shall comprise both the US customs territory and US foreign trade zones.

3/ See 19 U.S.C. 81a-u. See generally, U.S. INT'L TRADE COMM'N, PUB. NO. 1496, The Implications of Foreign Trade Zones for U.S. Industries and for Competitive Conditions Between U.S. and Foreign Firms (1984).

4/ Note, State Taxation of Imported Goods in Customs Bonded Warehouses, 17 GEO. WASH. J. INT'L LAW 555, 556-68 (1983). See generally, U.S. TARIFF COMM'N, PUB. NO. 170, Study of Temporary Entry Provisions of Title 19 of the United States Code (1966) and U.S. TARIFF COMM'N, PUB. NO. 286, Study of Temporary Entry Provisions of Title 19 of the United States Code (Part II, 1969).

5/ Prehearing Brief: Berg/Evans at 28; Transcript at 13, 31, 33-4, 59-60.

which are fundamentally different from those now employed to administer the reexport credit; 1/ it simply expands the scope of the credit to include quota steel that is substantially transformed in the United States prior to export. All of the steel exporting firms participating in this investigation support an expansion of the reexport credit; 2/ however, at least one statement was received opposing any liberalization of the present quota regime. 3/

The Caterpillar Tractor proposal embraces essentially the same suggestions with respect to substantial transformation put forward by Berg Steel/Evans Cooperage. In addition, this proposal would add an element not present in the first proposal--use of a "substitution" concept similar to that embodied in the duty drawback statute. 4/

Drawback in U.S. customs legislation generally refers to a procedure by which up to 99 percent 5/ of the amount of federal import taxes and duties paid on any imported material contained in virtually all exported articles may be recovered as much as 8 years after the original importation. 6/ The statute permits manufacturers to substitute domestic materials "of the same kind and quality" as the imported materials in the exported product and, upon exportation of the product, receive the same drawback of customs duties as they would have received if the imported materials had actually been used in the exported product. Although the law does not require use of the imported materials to manufacture the exported product, it does require actual use of the imported materials in the manufacturing process (e.g., for domestic consumption) within 3 years from the date of its receipt by the manufacturer. 7/ The first-in-first-out (FIFO) method of accounting for

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1/ It is, of course, equally accurate to characterize the current administration of the reexport credit as a "quota drawback". See, e.g., Posthearing Brief on behalf of Berg Steel Pipe Corp. and Evans Cooperage Co. at 3.

2/ Statement on behalf of Berg Steel Pipe Corp. and Evans Cooperage Co., Transcript at 13-14; Statement on behalf of Caterpillar Tractor Co., Transcript at 89; Prehearing Brief on behalf of Tooltech, Inc. at 2; Statement on behalf of United Casing, Inc., Transcript at 72-3.

3/ Statement on behalf of the United Steelworkers of America, AFL-CIO.

4/ Prehearing Brief on behalf of Caterpillar Tractor Co. at 11.

5/ The 1 percent retained by the government is intended to cover the cost of administering the drawback program, although the Commission has estimated that the actual cost of administration is much higher. U.S. TARIFF COMM'N, PUB. NO. 170 supra, at 30-1 (1966).

6/ A claim for drawback shall be allowed only if the completed article is exported within 5 years after importation of the merchandise identified or designated to support the claim. 19 C.F.R. 191.8(a). Claims for drawback must be filed within 3 years after the date of exportation of the articles on which drawback is claimed. 19 C.F.R. 191.61.

7/ If domestic materials are substituted "in the manufacture or production of articles within ... three years from the receipt of such imported merchandise by the manufacturer or producer" of the exported product, a claim for drawback may be submitted. 19 U.S.C. 1313(b).

production inventory may be used to identify commingled fungible merchandise "of the same kind and quality" under the drawback substitution provisions. 1/ Drawback cannot, of course, be collected twice for the same imported materials. 2/

The duties subject to drawback include ordinary customs duties, dumping duties, countervailing duties, 3/ and marking duties. 4/ Thus, it would not be inconsistent with the policies embodied in Title VII of the Tariff Act of 1930 to utilize a "substitution drawback" concept in the administration of the reexport credit provisions applicable to quota steel. However, the administrative complexity and large capital outlays often required by the duty drawback procedure raise some question concerning its utility to all of the exporting firms participating in this investigation. 5/

The Tooltech/United Casing proposal envisions treating quota steel intended to be reexported from the United States entirely outside the present quota regime. 6/ They advocate a separate "export accounting system" to be administered by the exporting governments in a manner similar to the present licensing system for steel products destined for U.S. consumption. All shipments intended for re-export from the United States would be certified as such by the exporting government and this certificate would become a condition for entry into the United States under the TIB procedure. They further advocate posting a bond in the amount of 200 percent of the "FOB value" of the shipment to deter quota circumvention. However, regulations now permit an entry for consumption of the bonded shipment if the importer forfeits the bond. 7/ Thus, the deterrent effect of a 200 percent bond would depend upon the price spread which develops in a two-tier U.S. market.

The TIB customs procedure generally allows most articles to enter the United States duty free upon posting a bond that guarantees their exportation or destruction within one year. 8/ The time may be extended for two additional one year periods. While in the United States, the imported articles may be "repaired, altered, or processed (including processes that result in articles manufactured or produced in the United States)" at the

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1/ C.S.D. 79-252, 13 Cust. Bull. 1351 (1979).

2/ See generally, Sturm, 1 CUSTOMS LAW & ADMINISTRATION, sec. 17.1(d).

3/ Sec. 779 of the Tariff Act of 1930 (19 U.S.C. 1677h), as added by sec. 622 of the Trade and Tariff Act of 1984.

4/ Import fees on sugar proclaimed pursuant to sec. 22 of the Agricultural Adjustment Act are also considered duties subject to drawback. T.D. 78-96, 12 Cust. Bull. 201 (1978).

5/ Statement on behalf of Tooltech, Inc., Transcript at 66-7; Statement on behalf of United Casing, Inc., Transcript at 72-3; Conversation with E. F. Gordon, President, Tooltech, Inc., Oct. 18, 1985; Conversation with T. Vatne, President, United Casing, Inc., Oct. 18, 1985.

6/ Posthearing submissions on behalf of United Casing, Inc. (dated Oct. 16, 1985, and Oct. 24, 1985); Statement on behalf of Tooltech, Inc., Transcript at 66-7.

7/ Conversation with staff of the U.S. Customs Service, Oct. 25, 1985.

8/ Item 864.05 and headnotes 1 and 2, pt. 5C, schedule 8, Tariff Schedules of the United States, 19 U.S.C. 1202.

importer's facility. The TIB procedure is available without regard to whether the imported materials are substantially transformed while in the United States. The Customs Service administers the TIB provisions through detailed import and export documents and by periodic inspection of inventories, production lines, and importers' records.

If the U.S. manufacturing process results in the creation of "valuable wastes," the TIB procedure permits duties to be "tendered on such wastes at rates of duties in effect for such wastes at the time of importation." 1/ The Customs Service advises that processing of imported steel under TIB procedures now in effect often results in as much as one-half of the import tonnage being classified as "valuable wastes" after U.S. processing. 2/ These "wastes" can be entered for consumption and, eventually, sold for recycling.

As noted above, the TIB procedure was made available to imported steel intended for reexport under the TPM. Some Japanese automobiles were permitted entry under TIB procedures although subject to the voluntary restraint program at the time. 3/ Generally, the policy of the Customs Service is to deny entry under TIB procedures to quota products, but some discretion is vested in the District Director to accept a higher than normal bond 4/ in order "to protect the revenue." 5/

Comments

At least two points should be kept in mind when reviewing these proposals. All of the proposals would clearly require some renegotiation of the current bilateral arrangements. The likelihood of success is unknowable but former Ambassador Brock has observed that--

> The impact of such an exclusion [from the arrangement] would necessitate a reevaluation of the delicate balance contained in the President's policy. 6/

The Caterpillar Tractor proposal would appear to require some revision to current customs procedures, at a minimum. The Tooltech/United Casing proposal might possibly be implemented under present TIB procedures but Customs Service policies with respect to quota merchandise under TIB would need to be clarified from the regulatory standpoint. And, in any event, there appears to be some possibility of diversion of quota steel into domestic consumption under present TIB regulations governing "valuable wastes.".

1/ Headnote 2(b)(ii), pt. 5C, schedule 8, Tariff Schedules of the United States, 19 U.S.C. 1202.

2/ Conversation with staff of the U.S. Customs Service, Oct. 25, 1985.

3/ Ibid.

4/ The usual TIB bond is "an amount equal to double the duties that it is estimated would accrue" under an ordinary consumption entry.

5/ 19 C.F.R. 10.31(f).

6/ Letter from Ambassador Brock to E. F. Gordon (dated Mar.6, 1985) submitted as an appendix to the Prehearing Brief on behalf of Tooltech, Inc.

APPENDIX A

COPY OF LETTER TO CHAIRWOMAN PAULA STERN FROM CHAIRMAN BOB PACKWOOD, COMMITTEE ON FINANCE, UNITED STATES SENATE, REQUESTING AN INVESTIGATION

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United States Senate
PAULA STERN, CHAIRWOMAN
COMMITTEE ON FINANCE
WASHINGTON, DC 20510

April 30, 1985

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

Dear Madam Chairman:

On September 18, 1984, the President directed the United States Trade Representative to negotiate agreements with those countries whose exports of steel have increased significantly in recent years. Agreements have already been concluded with many of the major exporting countries.

The Committee requests that the United States International Trade Commission conduct an investigation under section 332 of the Tariff Act of 1930 to examine the implications of the President's steel program for U.S. exports, particularly of products made from steel, including but not limited to steel shipping containers, drums and barrels.

The study should examine the domestic export industries that are most dependent upon steel inputs, and should analyze the extent to which the steel export restraints will affect their production costs. The study should also examine the possibility that some U.S. firms that consume steel might be induced to shift some of their operations overseas.

The Committee would appreciate a report on this matter by December 15, 1985.

Sincerely,

Bob Packwood

Bob Packwood
Chairman

BP:tkk

APPENDIX B

NOTICE OF THE COMMISSION'S INVESTIGATION

a manner that would reveal the individual operations of a firm.

Additional information or comment: Copies of the proposed forms and supporting documents may be obtained from Debra Baker (tel. no. 202-523-0284). Comments about the proposal should be directed to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503 (Attention: Ms. Francine Picoult). If you anticipate commenting on the proposal but find that time to prepare comments will prevent you from submitting them promptly you should advise OMB of your intent as soon as possible. Ms. Picoult's telephone number is (202) 395-7231. Copies of any comments should be provided to Charles Ervin (United States International Trade Commission, 701 E Street, NW. Washington, DC 20436).

Issued: June 27, 1985.

By order of the Commission.

Kenneth R. Mason,

Secretary.

[FR Doc. 85-15952 Filed 7-2-85; 8:45 am]

BILLING CODE 7020-02-M

[332-214]

Effects of Restraining U.S. Steel Imports on the Exports of Selected Steel-Consuming Industries

AGENCY: International Trade Commission.

ACTION: Institution of investigation and scheduling of public hearing.

EFFECTIVE DATE: June 25, 1985.

FOR FURTHER INFORMATION CONTACT: Jose Mendez (202-523-1792), Research Division, Office of Economics, U.S. International Trade Commission, Washington, DC 20436 (telephone 202-523-0275).

Background

The Commission instituted the investigation No. 332-214 under section 332(g) of the Tariff Act of 1930 (19 U.S.C. 1332(b)) following receipt on May 2, 1985 of a request therefore from the Committee on Finance of the United States for the purpose of gathering and obtaining information on the effects of restraining U.S. steel imports on the exports of selected U.S. steel consuming industries. In accordance with the Committee's request, the study will first identify the domestic export industries that are most dependent upon steel inputs, including but not limited to producers of steel products such as steel shipping containers, drums and barrels. For the identified industries, it will then undertake an assessment of the effects of the steel import restraints on their costs of production, exports, and investment decisions.

Public Hearing

A public hearing in connection with this investigation will be held at the U.S. International Trade Commission Building, 701 E Street NW., Washington, DC, beginning at 10:00 a.m., on October 8, 1985. All persons shall have the right to appear, by counsel or in person, to present information and to be heard. Requests to appear at the public hearing should be filed in writing with the Secretary to the Commission not later than the close of business (5:15 p.m.) on September 23, 1985. All persons desiring to appear at the hearing and make oral presentations should file prehearing briefs. The deadline for filing prehearing briefs is September 25, 1985.

Written Submissions

In lieu of or in addition to appearances at the public hearing, interested parties are invited to submit written statements concerning the investigation. Commercial or financial information which a 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 § 201.6 of the Commission's Rules of Practice and Procedure (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 no later than September 25, 1985. All submissions should be addressed to the Secretary at the Commission's office in Washington, DC.

Posthearing briefs must be submitted not later than the close of business on October 15, 1985. A signed original and 14 true copies of each submission must be filed with the Secretary to the Commission in accordance with § 201.8 of the Commission's Rules (19 CFR 201.8).

Hearing-imparied persons are advised that information on this matter can be obtained by contacting our TDD terminal on (202) 724-0002.

Issued: June 28, 1985.

By order of the Commission.

Kenneth R. Mason,

Secretary.

[FR Doc. 85-15953 Filed 7-2-85; 8:45 am]

BILLING CODE 7020-02-M

[Investigation No. 731-TA-207 (Final)]

Cellular Mobile Telephones and Subassemblies Thereof From Japan

AGENCY: International Trade Commission.

ACTION: Institution of a final antidumping investigations and scheduling of a hearing to be held in connection with the investigation.

SUMMARY: The Commission hereby gives notice of the institution of final antidumping investigation No. 731-TA-207 (Final) under section 735(b) of the Tariff Act of 1930 (19 U.S.C. 1673d(b)) to determine whether an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports from Japan of cellular mobile telephones and subassemblies thereof, classified under items 685.28 and 685.32 of the Tariff Schedules of the United States,[1] which have been found by the Department of Commerce, in a preliminary determination, to be sold in the United States at less than fair value (LTFV). Unless the investigation is extended, Commerce will make its final LTFV determination on or before August 19, 1985, and the Commission will make its final injury determination by October 9, 1985, (see sections 735(a) and 735(b) of the act (19 U.S.C. 1673d(a) and 1673d(b)).

For further information concerning the conduct of this investigation, hearing procedures, and rules of general application, consult the Commission's Rules of Practice and Procedure, part 207, subparts A and C (19 CFR Part 207), and part 201, subparts A through E (19 CFR Part 201, as amended by 49 FR 32569, Aug. 15, 1984).

EFFECTIVE DATE: June 11, 1985.

FOR FURTHER INFORMATION CONTACT: Larry Reavis (202-523-0296), Office of Investigations, U.S. International Trade Commission, 701 E Street NW., Washington, DC 20436.

SUPPLEMENTARY INFORMATION:

Background.—This investigation is being instituted as a result of an affirmative preliminary determination by the Department of Commerce that imports of cellular mobile telephones from Japan are being sold in the United States at less than fair value within the meaning of section 731 of the act (19 U.S.C. 1673). The investigation was requested in a petition filed on

[1] These tariff items were enacted in the Trade and Tariff Act of 1984, Pub. L. 98-573, effective January 1, 1985; item 685.29, referenced in investigation No. 731-TA-207 (Preliminary) was stricken from the TSUS.

APPENDIX C

CALENDAR OF PUBLIC HEARING

CALENDAR OF PUBLIC HEARING

Those listed below appeared as witnesses at the United States International Trade Commission's hearing on:

Subject : The Effects of Restraining U.S. Steel Imports on the Exports of Selected Steel-Consuming Industries

Inv. No. : 332-214

Date and time: October 8. 1985 - 10:00 a.m.

Sessions were held in the Hearing Room of the United States International Trade Commission, 701 E Street, N.W., in Washington.

IN OPPOSITION OR SEEKING EXEMPTION TO STEEL QUOTAS:
STEEL-CONSUMING INDUSTRIES

Arent, Fox, Kintner, Plotkin & Kahn--Counsel
Washington, D.C.
on behalf of

Berg Steel Pipe Corporation and Evans Cooperage Co., Inc.

Carl G. Seigler, Controller of Berg Steel Pipe Corporation

Ronald J. Evans, President of Evans Cooperage Co., Inc.

Lewis E. Leibowitz)
Ferenc Molnar)--OF COUNSEL
Carl A. Valenstein)

- more -

Tooltech, Inc., a Nortek Company, Minneapolis, Minnesota

Edward F. Gordon, President & Chief Executive Officer

William J. Magratten, Vice President, Marketing & Business Development

Tor Vatne, President, United Casing, Inc., Houston, Texas

Caterpillar Tractor Company, Peoria, Illionis

L. George. Steel Commodity Manager

Timotny Elder, Governmental Affairs

APPENDIX D

METHOD USED TO MEASURE THE POTENTIAL EFFECT OF THE EXPORT RESTRAINT PROGRAMS ON THE PRICE OF DOMESTIC STEEL

In order to assess the likely effect of the EC Arrangment and the import restraint program on the price of steel in the United States, we first make assumptions about what the level of imports would have been in the absence of the EC Arrangement and what they would be during the 1985-89 period if no program were in effect. Under "worst case" assumptions, the EC Arrangement has lowered the 1983 and 1984 level of total U.S. steel mill imports by 1.885 and 4.931 million tons, respectively. These represent a decline of total steel mill imports of 9.9 percent in 1983 and 18.9 percent in 1984. In contrast, using a set of moderate assumptions, the President's steel import restraint program would lower total imports of steel mill products approximately 30 percent annually from 1985 to 1989. In the first section below, we discuss the assumptions used to arrive at these levels. The percentage change in the level of imports is then used to determine the percentage by which the price of steel in the United States has risen or will rise because of the restraints. This is discussed in the second section.

Assumptions underlying projections of steel imports

EC Arrangement. In assessing the effects of the EC Arrangment, it is important to distinguish between its effectiveness in limiting EC exports to the United States and its effectiveness in reducing the total level of imports from what they would have been if no restraints had been in place. Consider first the effects on EC exports to the United States.

As outlined in an earlier section, the United States negotiated a voluntary restraint agreement with the EC in 1982. Under the agreement, the EC agreed to restrict its exports on a number of steel products to approximately 5.4 percent of U.S. apparent consumption. The actual quota was obtained by applying the agreed-upon market share to a forecast of apparent consumption. The respective products and their market shares are listed in table 11, in the text. If the quota projection allowed less (more) than the market share, an adjustment was to be made in subsequent periods.

This method for arriving at the actual quota, which has been described as novel because it permits a greater degree of flexibility, adds new complications to the traditional analysis of quotas. It leads to more ambiguous results when there are changes in demand. Under a conventional quota, an agreement is first reached on the level of imports to be permitted. Generally, if demand increases, the quota becomes more restrictive, and if demand declines, the quota may have no effect on the level of imports. Under the system developed for the EC Arrangement, the effects of changes in demand on the restrictiveness of the quota are ambiguous. Growth in demand can reduce or intensify the restrictiveness of the quota, and a fall in demand can also increase or reduce the restrictiveness of the quota. Without presenting a detailed analysis, it is sufficient to note that the effect of the restraint now depends on a host of other parameters that include the elasticity of EC supply to the United States, the elasticity of supply to the United States by the ROW suppliers, and the elasticity of demand with respect to income or the factor responsible for its shift.

In short, the analysis of the effects of the restraints on EC steel exports to the United States would have been simplified if a conventional method had been adopted to determine the quota amount. This is true primarily

because 1982 and 1983 were periods when United States demand for steel mill products dropped significantly. A reduction in demand of such magnitude would have made a conventional quota nonbinding. Under the present system of setting the quota amount, one cannot conclude a priori that the level of EC exports fell below the quota and that it was not binding on the EC.

Figures 1 and 2 and tables 5 in the text and D-1 provide an indication of the effect of the EC Arrangement on imports from the EC. Figure 1 illustrates that the market share of the EC in those product categories subject to the Arrangement fell from the level in 1981, the period prior to the implementation of the Arrangement, through 1983 and 1984. 1/ From 1981 to 1983, the share declined by 22 percent and, from 1983 to 1984, it fell an additional 28 percent. This figure appears to indicate that the EC Arrangement was effective in limiting or stabilizing the share of EC exports to the United States. Figure D-1 illustrates, however, the behavior of the EC import market share in products that fell outside the Arrangement. Here, too, the EC suffered a sharp loss in its market share in 1983, from 25.6 percent to 19.3 percent of total imports. Nonetheless, this share recovered in 1984 to a level exceeding that in 1981, rising to 28.6 percent. In addition, table 5 provides data on the level of steel mill imports from the EC and ROW during this period. The 1984 levels exceed the 1981 levels in all cases, except for the EC in those products subject to the Arrangement. Lastly, table 5 also includes information on the respective shares of apparent consumption for products outside and within the Arrangement. This pattern is similar to that exhibited with respect to import shares. The EC share of apparent consumption for those products subject to the Arrangement has fallen throughout the period since 1981, whereas the share for those products outside the Arrangement was in 1984 above that in 1981. On the basis of these observations, it seems plausible to conclude that the EC Arrangement was effective in limiting the imports of EC steel mill products, particularly during 1984, below the level that they would have exported without any restraints. The restraints restricted the EC from benefiting from the advantage provided by the 42.2 percent appreciation on a nominal basis or 33.5 percent appreciation in real terms of the trade-weighted EC/dollar exchange rate from 1981 to 1984.

Although it is highly likely that the EC Arrangement did effectively restrict EC exports of steel mill products to the United States, its effectiveness in reducing total U.S. steel imports below that which would have

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1/ 1983 values refer to the period Oct. 1, 1982, to Dec. 31, 1983. To facilitate comparisons, they have been adjusted to an annual basis. As can be seen from tables D-2 and D-3, the adjustment has no effect on the analysis.

Table D-1.--Steel mill products: Import shares by specified periods, 1/ 1981-84

(In percent)

Period	Total	From EC	From ROW	Brazil	Canada	Japan	Republic of Korea	Spain	All other
	Total steel mill products								
1981	100.0	32.6	67.4	2.75	14.6	31.3	6.12	3.67	9.05
1983 2/	100.0	26.3	73.7	6.67	13.5	24.8	9.49	3.23	16.0
1984	100.0	24.2	75.8	5.58	12.1	25.3	8.54	5.32	18.9
	Steel mill products (15 categories) subject to U.S.-EC Arrangement								
1981	100.0	38.4	61.6	3.56	13.9	26.6	3.17	4.26	10.1
1983 2/	100.0	29.87	70.13	7.65	12.0	25.1	6.26	3.59	15.5
1984	100.0	21.41	78.59	4.75	12.8	27.4	6.25	6.24	21.1
	Steel mill products outside the U.S.-EC Arrangement								
1981	100.0	25.6	74.4	1.77	15.3	36.9	9.68	2.95	7.80
1983 2/	100.0	19.6	81.8	4.80	16.6	24.6	16.1	2.55	17.3
1984	100.0	28.6	71.4	6.89	11.1	22.1	12.1	3.88	15.4

1/ Carbon, stainless, and alloy steel, whether or not subject to the Arrangement concerning trade in certain steel products became effective October 1982.

2/ 1983 values refer to the period Oct. 1, 1982, to Dec. 31, 1983.

Source: Compiled from data in U.S. International Trade Commission, Monthly Report on Selected Steel Industry Data.

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Table D-2.--Steel mill products: Imports for consumption, 1981-84 and January-March 1985

Period	Total	From EC	Belgium-Luxembourg	France	Italy	Nether-lands	United Kingdom	West Germany	From ROW	Brazil	Canada	Japan	Republic of Korea	Spain
	Quantity (short tons)													
1981	19,898	6,482	1,109	1,289	768	463	574	2,164	13,416	548	2,899	6,220	1,218	730
1982	16,663	5,597	929	977	644	375	486	2,080	11,066	605	1,844	5,185	1,062	547
1983	17,071	4,115	616	914	395	371	364	1,387	12,956	1,257	2,379	4,237	1,728	610
1984	26,164	6,335	921	1,127	654	447	476	2,543	19,829	1,461	3,167	6,630	2,234	1,392
Jan.-Mar. 1985	6,747	1,845	291	392	150	162	177	630	4,902	530	731	1,709	493	140
	Share of apparent consumption (Percent)													
1981	18.9	6.1	1.1	1.2	0.7	0.4	0.5	2.1	12.7	0.5	2.7	5.9	1.2	0.7
1982	21.8	7.3	1.2	1.3	.8	.5	.6	2.7	14.5	.8	2.4	6.8	1.4	.7
1983	20.5	4.9	.7	1.1	.5	.4	.4	1.7	15.5	1.5	2.9	5.1	2.1	.7
1984	26.6	6.5	.9	1.1	.7	.5	.5	2.6	20.2	1.5	3.2	6.8	2.3	1.4
Jan.-Mar. 1985	27.6	7.5	1.2	1.6	.6	.7	.7	2.6	20.0	2.2	3.0	7.0	2.0	.6
	Share of total imports (Percent)													
1981	100.0	32.6	5.6	6.5	3.9	2.3	2.9	10.9	67.4	2.8	14.6	31.3	6.1	3.7
1982	100.0	33.6	5.6	5.9	3.9	2.3	2.9	12.5	66.4	3.6	11.1	31.1	6.4	3.3
1983	100.0	24.1	3.6	5.4	2.3	2.2	2.1	8.1	75.9	7.4	13.9	24.8	10 1	3.6
1984	100.0	24.2	3.5	4.3	2.5	1.7	1.8	9.7	75.8	5.6	12.1	25.3	8.5	5.3
Jan.-Mar. 1985	100.0	27.3	4.3	5.8	2.2	2.4	2.6	9.3	72.7	7.9	10.8	25.3	7.3	2.1

Source: Compiled from data in U.S. International Trade Commission, Monthly Report on Selected Steel Industry Data.

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Table D-3.--Total steel mill products (15 categories) subject to the U.S.-EC Arrangement, 1981-84 and January-March 1985

Period	Total	From EC	Belgium-Luxembourg	France	Italy	Nether-lands	United Kingdom	West Germany	From ROW	Brazil	Canada	Japan	Republic of Korea	Spain
	Quantity (short tons)													
1981	10,880	4,173	946	995	188	425	371	1,201	6,707	388	1,516	2,896	345	464
1982	9,163	3,596	808	670	221	320	270	1,287	5,567	388	1,114	2,324	372	366
1983	11,336	3,024	494	696	201	300	281	1,015	8,312	967	1,395	2,902	753	461
1984	15,954	3,416	534	751	213	338	294	1,249	12,538	758	2,038	4,375	997	996
Jan.-Mar. 1985	4,182	1,190	174	275	70	145	122	387	2,992	263	487	1,046	216	84
	Share of apparent consumption (Percent)													
1981	15.3	5.9	1.3	1.4	.3	.6	.5	1.7	9.4	.5	2.1	4.1	.5	.7
1982	17.3	6.8	1.5	1.3	.4	.6	.5	2.4	10.5	.7	2.1	4.4	.7	.7
1983	18.2	4.9	.8	1.1	.3	.5	.5	1.6	13.3	1.6	2.2	4.7	1.2	.7
1984	22.5	4.9	.8	1.1	.3	.5	.4	1.8	17.7	1.1	2.9	6.2	1.4	1.4
Jan.-Mar. 1985	23.4	6.7	1.0	1.5	.4	.8	.7	2.2	16.8	1.5	2.7	5.9	1.2	.5
	Share of imports (Percent)													
1981	100.0	38.4	8.7	9.1	1.7	3.9	3.4	11.0	61.6	3.6	13.9	26.6	3.2	4.3
1982	100.0	39.2	8.8	7.3	2.4	3.5	2.9	14.0	61.1	4.2	12.2	25.4	4.1	4.0
1983	100.0	26.7	4.4	6.1	1.8	2.6	2.5	9.0	73.3	8.5	12.3	25.6	6.6	4.1
1984	100.0	21.4	3.3	4.7	1.3	2.1	1.8	7.8	78.6	4.8	12.8	27.4	6.2	6.2
Jan.-Mar. 1985	100.0	28.5	4.2	6.6	1.7	3.5	2.9	9.3	71.5	6.3	11.6	25.0	5.	2.0

1/ Carbon, stainless and alloy steel, whether or not subject to the Arrangement concerning trade in certain steel products, which became effective in October 1982.

Source: Compiled from data in U.S. International Trade Commission, Monthly Report on Selected Steel Industry Data.

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Table D-4.--Indices of nominal, real and trade-weighted exchange rates for certain foreign suppliers of steel mill products to the United States by specified periods, 1981-85

Period	Trade-weighted: total	Trade-weighted: EC	Belgium-Luxembourg	France	Italy	Netherlands	United Kingdom	West Germany	Trade-weighted: ROW	Brazil	Canada	Japan	Korea	Spain
	Units of foreign currency per U.S. dollar													
Jan. 1981-June 1982	-	-	39.169	5.669	1188.0	2.532	0.511	2.294	-	111.8	1.208	226.6	693.7	96.08
July 1982-Dec. 1983	-	-	49.633	7.417	1484.0	2.814	.635	2.533	-	454.7	1.235	244.8	764.8	134.32
Jan.-1984-June 1985	-	-	59.778	9.054	1836.6	3.334	.777	2.955	-	2757.7	1.317	243.1	821.6	166.19
	Nominal-exchange rate indices (1981-1982:2Q = 100)													
Jan. 1981-June 1982	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 1982-Dec. 1983	126	121	127	131	125	111	124	110	129	407	102	108	110	140
Jan. 1984-June 1985	223	146	153	160	155	132	152	129	278	2467	109	107	118	173
	Real-exchange rate indices (1981-1982:2Q = 100)													
Jan. 1981-June 1982	100	100	100	100	100	100	100	100	100	100	100	100	100	100
July 1982-Dec. 1983	113	116	120	121	108	112	121	110	111	133	97	111	109	125
Jan. 1984-June 1985	124	135	139	139	121	134	144	130	116	166	103	113	119	139

Source: Compiled from data in IMF, International Financial Statistics and USITC, Monthly Report on Selected Steel Industry Data.

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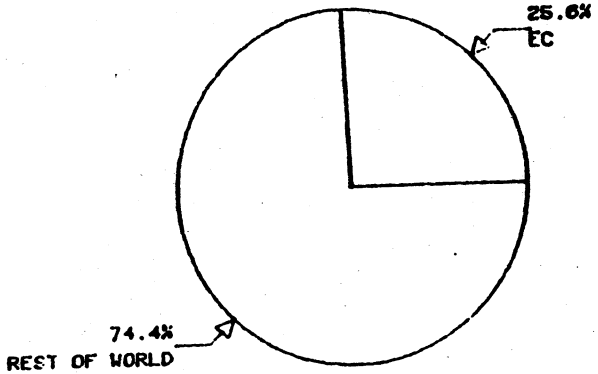
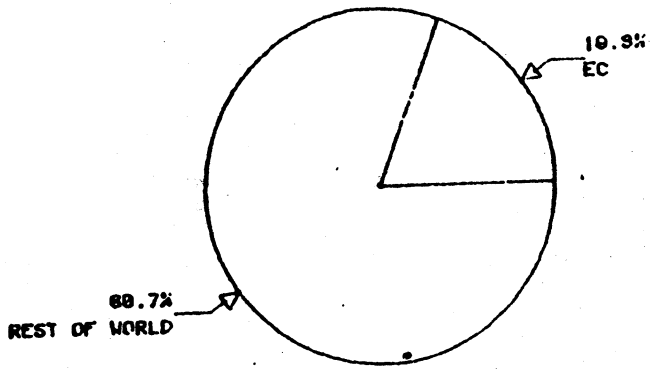
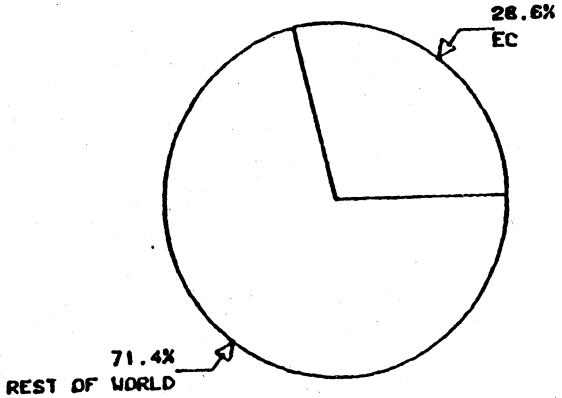
Figure D-1--EC share of total U.S. imports of steel mill products not subject to EC Arrangement, 1981, 1983, and 1984



IMPORT SHARE 1981



IMPORT SHARE 1983



IMPORT SHARE 1984

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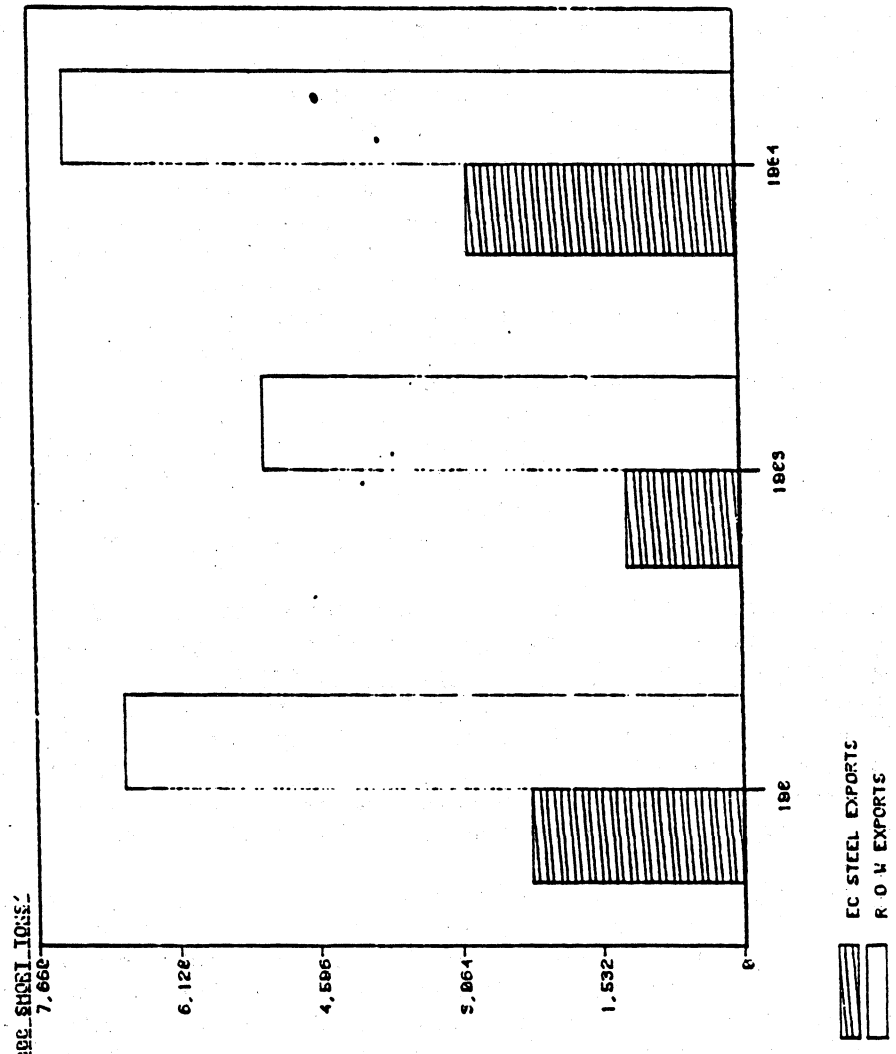
Figure D-2.--EC and ROW exports to the United States of steel mill products not subject to EC Arrangement, 1981, 1983, and 1984



occurred without the export restraint program is more difficult to assess. Turning again to table 5, data are presented on U.S. imports of steel mill products from other supplying countries. On a net basis, imports from the rest of the world increased 2.117 million tons from 1981 to 1983, from a level of 6.7 million tons in 1981 to 8.8 million tons in 1983. During the same period, imports from the EC fell 0.415 million tons. Its unclear whether the ROW suppliers increased their exports (i) in order to take advantage of the loss in the EC share, (ii) in response to the reduced supply of these products, or (iii) as they normally would have even if the Arrangement had not been in place due to increasing capacity.

To address the problem of determining what the likely impact of the EC Arrangement was on the volume of steel mill imports and, in turn, on the weighted-average price of steel mill products, we construct a so-called "worst case" or upper-bound estimate of the reduction in total steel mill imports because of the export restraints on the EC. To do so, we make the following assumptions: First, we assume that ROW suppliers did not alter their behavior: they responded as they would have if no agreement had been in place. By excluding cases (i) and (ii) above, we are ruling out the possibility that there was no effect on the price of steel because of the rest of the world suppliers having replaced or lessened the loss in EC exports. Economic theory would suggest that if the EC Arrangement had been effective (which it appears to have been) these suppliers would have increased their supply relative to what they would have exported without the EC Arrangement, since the reduction in EC exports would have raised the price of steel or lessened its decline. This is especially valid in a highly competitive market. However, if the ROW suppliers had increased their supply, by ignoring it, we are overestimating the reduction in exports to the United States.

Second, and most importantly, we assume that the EC would have increased its share of apparent consumption of products covered under the Arrangement at the same rate at which the ROW suppliers increased their share of apparent consumption. As reflected in table 6, this would have raised EC imports covered by the Arrangement from 3.758 million tons in 1983 to 5.643 million tons and from 3.416 million tons in 1984 to 8.347 million tons. The share of apparent consumption would also have increased from 5.49 percent in 1983 to 8.73 percent and from 4.79 percent in 1984 to 12.3 percent.

An increase in the EC level of exports (or a smaller decline) certainly seems plausible in light of the movement of the exchange rates. As noted, the EC was favored by a 33.5 percent real (42.2 percent nominal) appreciation of the EC/dollar trade-weighted exchange rate from 1981 through 1984. Moreover, table D-4 indicates that the movement of the exchange rate did not place the EC at a relative disadvantage in comparison with the ROW suppliers.

Nevertheless, this assumption overestimates the decline (or increase) in EC exports for a number of reasons. The period under the Arrangement was a period in which the EC was reducing its capacity, and other suppliers were expanding capacity and the EC would not have been expected to raise its share of apparent consumption at the same rate as the ROW. In fact, its share of apparent consumption has been declining since it reached its peak in 1973. The EC share of apparent consumption has never exceeded the 1973 level of 8.3 percent, and the share averaged 5.08 percent from 1972 to 1981. Yet, both the average and the previous high are exceeded in the first year of the projection. In addition, the 1984 estimated EC level of exports to the United

States of steel mill products subject to the Arrangement, 8.73 million tons, alone exceeds the previous high of 8.513 million tons attained by the EC for all steel mill products in 1971. But, most importantly, applying the limits set by the Arrangement to the 1981 EC shares of apparent consumption in the individual markets only reduces the level of exports to the United States by 323,774 short tons. Although this reduction represents a 7.8 percent reduction in EC exports of those products and a reduction in their share of apparent consumption from 5.88 to 5.46, it only amounts to a 1.6 percent decline in 1981 apparent consumption of total steel mill products. See table 11 in text. A decline of this magnitude would have little impact on the weighted-average price of steel.

As a final comment, note that we have not addressed the issue of trade diversion by the EC from low-value products to high-value products covered by the Arrangement and from products covered by the Arrangement to products outside the agreement. With respect to the latter, if trade diversion has occurred from products within the Arrangement to products outside the Arrangement, then our procedure again leads to an upward bias on the effect of the export limits. With trade diversion by the EC, the decline in total steel mill exports would not have been as large as projected. The issue of trade diversion within products covered by the agreement is more difficult to assess without a detailed analysis of the individual products. On an aggregate basis, unit values for EC exports subject to the Arrangement were lower in 1984 than in 1981. In 1981, the value of total EC steel mill exports subject to the Arrangement was 1.561 million dollars and the quantity was 4.173 million short tons. In 1984, both the total value and quantity were lower: 1.203 million dollars and 3.416 million short tons. The unit values are $374 per short ton in 1981 and $352 per short ton in 1984. If the 1984 unit value is adjusted by the quantity shares that existed in 1981, the unit value declines to $340 per short ton and gives an indication that no trade diversion occurred. This analysis is, however, not conclusive. First, the exchange rate movements that occurred during the period cloud dollar comparisons of unit values since suppliers may or may not pass steel price reductions on to U.S. purchasers. In addition, comparisons are clouded by the fact that the high-value product in each category is small in magnitude relative to the low-value product. For instance, the unit value in 1984 for EC hot-rolled carbon steel sheet and strip was $292 per short ton and the unit value for hot-rolled alloy steel sheet and strip was $2,413 per short ton, whereas the import quantities were 955,390 short tons of the hot-rolled carbon steel sheet and strip and only 4,694 short tons of hot-rolled alloy steel sheet and strip. Thus, any trade diversion that occurs is unlikely to be reflected in the aggregate unit value.

Steel Import Restraint Program. To determine the effects of the President's steel import restraint program, its necessary to forecast (for the period 1985 through January-September 1989) the values of a number of economic variables which would exist in the absence of the restraints on steel imports. These are (i) the level of U.S. apparent consumption of all steel mill products; (ii) the import share of apparent consumption of steel mill products; (iii) the level of imports of semifinished steel products; and (iv) the rate of growth of U.S. exports. The assumptions adopted are discussed below.

In the U.S. Department of Commerce, 1985 U.S. Industrial Outlook, Prospects for over 350 Industries, U.S. apparent consumption of steel is projected to grow to a level of 105-110 million short tons per year by 1989. A Data Resources' forecast from the Steel Industry Review, Second Quarter 1985, projects that steel demand will grow slowly over this same period, from 96.3 million short tons in 1985 to 99.6 million short tons in 1989. In addition, in their 1983 study, Steel: Upheaval in a Basic Industry (Cambridge, Mass.: Ballinger Publishing Co., 1983), Donald F. Barnett and Louis Schorsch project apparent steel consumption to be 107 million tons by 1990. To obtain a moderate forecast or one within the range of the highest and lowest projection, we use the lower-bound of the Department of Commerce forecast as an estimate of apparent consumption. Thus, for the projections used in this study, we first annualize the first two quarters of 1985 to obtain a 1985 level of apparent consumption and then apply a 1.45 annual (exponential) rate of growth to the 1985 level to obtain successive years.

Projecting the import share of apparent consumption of steel mill products is the most difficult projection to make, yet possibly the most important. The value of the share in the future will depend critically on the future course of the U.S. dollar. Over the last decade since the breakdown of the fixed par value system and the adoption of floating rates by major countries, no economic models have had success in charting the exchange rates' future behavior. Although most economists argue that the dollar is overvalued and should decline in the future, it is unclear whether it will fall and, if it does, at what rate. To project the import share of apparent consumption in the absence of VRA's, it is assumed that it will remain constant at the level achieved in 1984. This is based on the observation that a common pattern exhibited by import shares is a ratcheting effect. Import shares remain relatively stable for lengthy periods of time, until changes in relative prices or other events, such as the threat of strikes, causes the share to ratchet upwards. Once having moved upward, the share remains at this higher level of penetration for a lengthy period of time. In 1984, the import share of apparent consumption stood at 26.6 percent.

The President's steel import restraint program calls for separate quota on imports of semifinished steel of 1.7 million short tons. A recent USITC investigation, using information gathered from consumers of semifinished steel, has forecast the level of imports of semifinished steel products to be between 1.7 to 3.1 million short tons in 1988. 1/ The projection used in this study is derived by taking the average of this estimate for the value in 1988 and then deriving the remaining values using the annual rate of growth from 1984 to 1988.

The remaining variable to forecast is the rate of growth of U.S. exports. The (f.a.s.) value of total U.S. exports from 1978 to 1984 and the annual rate of change are the following:

1/ The Effects of Semifinished Steel Imports on the U.S. Iron and Steel Scrap Industry, (Investigation No. 332-195), USITC Publication 1692, May 1985.

Year	Total exports (f.a.s.) (millions of dollars)	Annual change (percent)
1978	135,952	
1979	174,603	28.4
1980	212,129	21.5
1981	223,647	5.4
1982	200,006	-10.6
1983	202,790	1.4
1984	220,076	8.5

U.S. exports fell in 1982 to $200 billion from $223.6 billion in 1981. In 1983, they rose to $202.8 billion. Although a significant factor in the decline and lack of growth of exports during this period was the strengthening of the dollar, the worldwide recession also played a dominant role. As the world began to recover, exports rose in 1984 by 8.5 percent to $220.1 billion. How exports behave in the future will, of course, depend on the value of the dollar and the strength and length of the recovery abroad. In this study we assume that exports will rise at a modest annual rate of 6 percent from 1984 to 1989. 1/

1/ The U.S. Department of Commerce, 1985 U.S. Industrial Outlook, Prospects for over 350 Industries, projects a 6.1 percent rise from 1984 to 1985 and an 8 percent increase thereafter.

Methodology for estimating effect on price of steel.

This section describes the methodology used to calculate the effect of the EC Arrangement and the steel export restraint program on the weighted-average price of steel in the United States. This section essentially translates the percentage decline in total imports of steel mill products (calculated in the previous section) into a percentage increase in the weighted-average price of steel mill products. The approach adopted in this study is a partial equilibrium analysis commonly used to determine the percentage increase in the price of a product given a reduction or limitation in its import supply. As is common, the analysis of this study also focuses on the effect on the total market for steel mill products, given the high degree of substitution in demand and supply. 1/

The underlying model is based on the following assumptions. A number of empirical studies have established that the appropriate model for modeling the market for steel is the imperfect substitutes trade model. 2/ This essentially means that imported and domestic steel are imperfect substitutes for one another in consumption. The equations for this type of model are the following. On the demand side, the demands for domestic and imported steel, are, respectively,

$$Q_d^d = Q_d^d(P_D, P_M, I) \qquad (1)$$

$$Q_m^d = Q_m^d(P_D, P_M, I) \qquad (2)$$

where P_D, P_M, and I are the domestic price of steel, the import price of steel, and the index of industrial production. The respective own-price, cross-price, and income elasticities of demand are $(-n_{DD})$, n_{DM}, n_{DI}, $(-n_{MM})$, n_{MD}, and n_{MI} where the subscript ij denotes the demand elasticity for good i with respect to a change in the jth variable. On the supply side, the domestic supply is specified as a function of the domestic price, technology, and the price of inputs:

$$Q_d^s = Q_d^s(P_D, p_i, T) \qquad (3)$$

where p_i and T represent proxies for the prices of inputs and the state of technology. Because of the competitiveness of the international steel market, the import price is determined in world markets and is treated as exogenous.

1/ See, for example, David G. Tarr and Morris E. Morkre, Aggregate Costs to the United States of Tariffs and Quotas on Imports: General Tariff Costs and Removal of Quotas on Automobiles, Steel, Sugar and Textiles, An Economic Policy Analysis, Bureau of Economics Staff Report to the Federal Trade Commission, December 1984, and Donald J. Rousslang and John W. Suomela, Calculating the Consumer and Net Welfare Costs of Import Relief, Staff Research Study 15, Office of Economics, USITC, July 1985.

2/ See, in particular, Robert W. Crandall, The U.S. Steel Industry in Recurrent Crisis, Policy Options in a Competitive World, (Washington,D.C.: the Brookings Institution, 1981), and James M. Jondrow, et al, "The Price Differential between Domestic and Imported Steel," The Journal of Business 55, July 1982.

The parameters of interest in this study are (dP_D/P_D) and (dP_M/P_M), the percentage change in the domestic price of steel and the percentage change in the import price of steel. To calculate how these prices are affected by (dQ_m^d/Q_m^d), the percentage reduction in the quantity of imports due to the imposition of the EC Arrangement or the import restraint program, totally differentiate (1), (2), and (3). Doing so, we obtain,

$$(dQ_d^s/Q_d^s)=e_D(dP_D/P_D) \tag{5}$$

$$(dQ_d^d/Q_d^d)=-n_{DD}(dP_D/P_D)-n_{DM}(dP_M/P_M) \tag{6}$$

$$(dQ_m^d/Q_m^d)=-n_{MM}(dP_M/P_M)+n_{MD}(dP_D/P_D) \tag{7}$$

where e_D is the elasticity of domestic supply. These expressions can, in turn, be solved for $(dP_D)/P_D$ and (dP_M/P_M) in terms of (dQ_m^d/Q_m^d). Doing so, we have the effect of a change in the quantity of imports on the domestic price of steel and on the price of imports:

$$\ln[1+(dP_D/P_D)]=[-(n_{DM})/(n_{MM}(e_D+n_{DD})-(n_{DM}n_{MD}))] * \ln[1+(dQ_m^d/Q_m^d)] \tag{8}$$

$$\ln[1+(dP_M/P_M)]=[-(e_D+n_{DD})/(n_{MM}(e_D+n_{DD})-(n_{DM}n_{MD}))] * \ln[1+(dQ_m^d/Q_m^d)] \tag{9}$$

where the expressions have been written in constant elasticity of demand form for convenience.

Use of this model requires that we have data on all the various parameters. These are all obtained from the study by Crandall and are listed in table D-5. Two estimates of the domestic elasticity of supply were used in Crandall's study, one assumed and the other estimated. Both are listed in the table and both are used below to illustrate that use of either has little effect on the calculations. Although both are presented below, this study employs only the Crandall estimates to maintain consistency. With the parameters listed in table D-5, (8) and (9) are simplified to

(Crandall)

$$\ln[1+(dP_D/P_D)]=[-.2454] \text{ X } \ln[1+(dQ_m^d/Q_m^d)] \tag{8C}$$

$$\ln[1+(dP_M/P_M)]=[-.0292] \text{ X } \ln[1+(dQ_m^d/Q_m^d)] \tag{9C}$$

and,

(Jondrow)

$$\ln[1+(dP_D/P_D)]=[-.2680] \text{ X } \ln[1+(dQ_m^d/Q_m^d)] \tag{8J}$$

$$\ln[1+(dP_M/P_M)]=[-.0549] \text{ X } \ln[1+(dQ_m^d/Q_m^d)] \tag{9J}$$

(8) and (9) are then weighted by the initial share of domestic supply and

Table D-5.--Estimates of elasticities of demand and supply

Elasticity	Estimate
Own Price elasticity of demand	
for domestic steel	$(-n_{DD})$= -1.55
for imported steel	n_{DM} = 0.60
Cross-price elasticity of demand	
for domestic steel	$(-n_{MM})$= -4.55
for imported steel	n_{MD} = 4.00
Elasticity of supply	
for domestic steel--Crandall	e_D = 3.50
for domestic steel--Jondrow	e_D = 1.38

Source: All demand elasticities and one supply elasticity were obtained from Robert W. Crandall, The U.S. Steel Industry in Recurrent Crisis, Policy Options in a Competitive World, (Washington,D.C.: the Brookings Institution, 1981). The remaining estimate of the supply elasticity was obtained from James M. Jondrow, "Effects of Trade Restrictions on Imports of Steel," in U.S. Department of Labor, Bureau of International Labor Affairs, The Impact of International Trade and Investment on Employment (Washington, D.C.: Government Printing Office, 1978).

import supply to obtain, t, the weighted-average change in the price of steel induced by the restraints. Specifically,

$$t = (S_d)\ln[1+(dP_D/P_D)] + (S_m)\ln[1+(dP_M/P_M)]$$

where S_d and S_m are the domestic and import share for steel.

APPENDIX E

METHOD USED TO CALCULATE THE EFFECT ON THE COSTS OF PRODUCTION OF STEEL-CONSUMING INDUSTRIES

In this section, we describe the methodology used to calculate the effect of an increase in the price of steel for the costs of production of steel-consuming industries. The methodology used is based on that found in J. Melvin, "Short-Run Price Effects of the Corporate Income Tax and Implications for International Trade," American Economic Review (December 1979): 765-774. It's principal assumption is that the increase in the costs of production experienced by industries is passed forward to consumers of the product.

Following the analysis outlined by Melvin (1979), for any industry i, the condition that total cost (which includes the payments for intermediate goods and the factors of production) equals total revenue may be expressed as--

$$P_iX_i = P_1X_{1i}+P_2X_{2i}+\ldots+P_nX_{ni}+wL_i+rK_i \quad i=1,2,\ldots,n \quad (1)$$

where P_i, w, and r are, respectively, the price of commodity i, the wage rate, and the return to capital. L_i is labor and K_i is the stock of capital employed by industry i. The X_{ji} refer to the amount of good j used in the production of good i. The above may be rewritten by dividing by P_iX_i to obtain--

$$1 = a_{1i} + a_{2i} + \ldots + a_{ni} + l_i + k_i \quad i=1,2,\ldots,n \quad (2)$$

The a_{ji}'s are the input-output coefficients and l_i and k_i are, respectively, (wL_i/P_iX_i) and (rK_i/P_iX_i). In input-output analysis, the a_{ji}'s are often referred to as the "direct requirements coefficients." 1/ They indicate that a_{ji} cents of industry j were required to produce a dollar's worth of i's output.

Now consider the effect of an increase in the price of steel, calculated earlier to be "t" percent. The immediate impact of this price increase is to raise the costs of industries using steel. Letting i=2 refer to the steel industry, costs per unit in the ith industry rise by $s_i = (a_{2i} * t)$. In other words, the impact of a t = 10 percent increase in the price of steel would raise an industry's per unit costs by s = 1 percent if the amount of steel they use per dollar of output, a_{2i}, is .10 or 10 percent. To reflect this direct and immediate effect on costs per unit, equation (2) can be rewritten as

$$1+s_i = a_{1i} + a_{2i}(1+t) + \ldots + a_{ni} + l_i + k_i \quad (3)$$

for i=1,2,...,n industries.

Equation (3) captures the immediate impact of the rise in the price of steel on the price of X_i. However, the price of X_i is also affected indirectly by the increase in the price of steel. Industry i uses in its

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1/ U.S. Bureau of Economic Analysis, "The Input-Output Structure of the U.S. Economy, 1977," The Survey of Current Business (May 1984).

production the output of other industries whose price, like that of industry i, has been affected by the increase in the price of steel. The latter includes the steel industry since it is a major user of steel. For instance, the 1977 BEA Input-Output table indicates that input-ouput industry 37.0105, steel pipes and tubes, which is comparable to SIC 3317, uses 0.405 cents of input-output industry 37, primary iron and steel manufacturing. Thus, the increase in the price of steel raises the price of X_i directly and indirectly through its effect on the price of other commodities which it uses as inputs. The total effects can be expressed as--

$$1+p_i = a_{1i}(1+p_1) + a_{2i}(1+t+p_2) + \ldots + a_{ni}(1+p_n) + l_i + k_i \quad i=1,2,\ldots,n \quad (3a)$$

where the p_i's incorporate the direct and indirect effect of the price increase. Figure E-1 depicts the various effects of the price increase on the supply curve of the domestic industry. Note that the use of this specification ignores the impact of factor price changes on the input-output coefficients. However, it can be shown that this specification is true as an approximation.

Subtracting equation (2) from equation (3a) we obtain--

$$p_i = a_{1i}(p_1) + a_{2i}(p_2) + \ldots + a_{ni}(p_n) + a_{2i}(t) \quad (4)$$

Placing the equations for all n industries in matrix form, (4) becomes--

$$P = [A]\ P + [a_{2i}]\ t \quad (5)$$

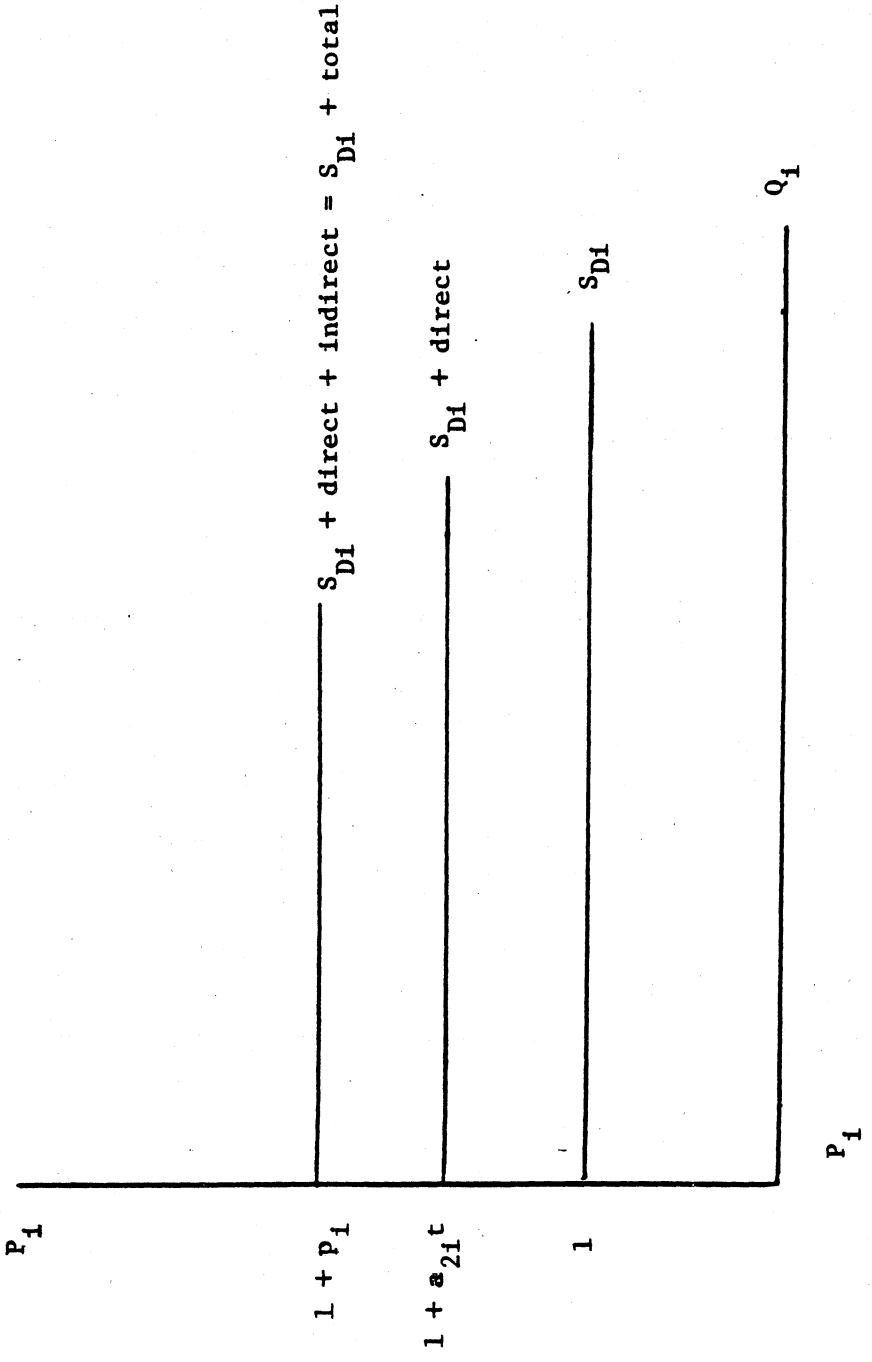
where A is the United States input-output table; t is the initial weighted-average change in the price of steel induced by the restraints.

The total percentage increase in the price of all commodities as a result of the t percent increase in the price of steel is derived by solving (5) for P. Thus,

$$P = [I - A]^{-1} * [a_{2i}]\ t \quad (5')$$

Equation (5') is combined with the estimates of the percentage change in the weighted-average price of steel, t, calculated in appendix D.

Figure E-1.--Direct and indirect effect on unit costs



APPENDIX F

METHOD USED TO CALCULATE THE EFFECT ON THE EXPORTS OF STEEL-CONSUMING INDUSTRIES

This appendix is closely tied to the two preceeding appendices. For a more complete discussion of the notation, refer to those appendices. In this section, we outline how the percentage increase in the price of a commodity as a result of a steel price induced increase in its production costs--equation (8') in appendix E--leads to a reduction in the exports of affected industries. For ease of exposition, refer to figure F-1 which reproduces figure E-1. The quantity axis, however, refers to industry i's exports and curve D_i represents the foreign demand for the industry's exports. As indicated in appendix E, the increase in the price of steel has the effect of shifting an industries supply curve upward. The effect of the price increase on industry exports then depends on the percentage change in the price, which determines the upward shift, and on the elasticity of the foreign demand for U.S. exports, which determines the decline in X_i resulting from the price increase. In equation form, the change in the value of exports, P_XX, because of the steel restraint program induced price increase is--

$$d(P_XX) = P_XX\ (-n_X)\ [I - (A * d)]^{-1} * [a_{2i}]\ t \qquad (9')$$

where n_X is a 79 by 1 vector of the the elasticity of export demand and P_XX is the initial value of industry exports. These elasticities at the two-digit input-output industry sector are derived from Robert E. Baldwin and Wayne E. Lewis, "U.S. Tariff Effects on Trade and Employment in Detailed SIC Industries," in U.S. Department of Labor, Bureau of International Labor Affairs, The Impact of International Trade and Investment on Employment (Washington, D.C.: Government Printing Office, 1978). This basic equation is used in all the calculations of the impact of steel import restraints on the exports of steel-consuming industries at the two-digit input-output level. Note that it measures the reduction in the value of exports at the original price. This is area $[bcX_iX_i']$ in figure F-1 and is not the net change in the value of export receipts, area $[ab(1)(1+p_i)]-[bcX_iX_i']$. Area $[ab(1)(1+p_i)]$ is ignored since it represents a transfer to the steel industry, while area $[bcX_iX_i']$ is the reduction in the return to factors employed in domestic steel-consuming industries.

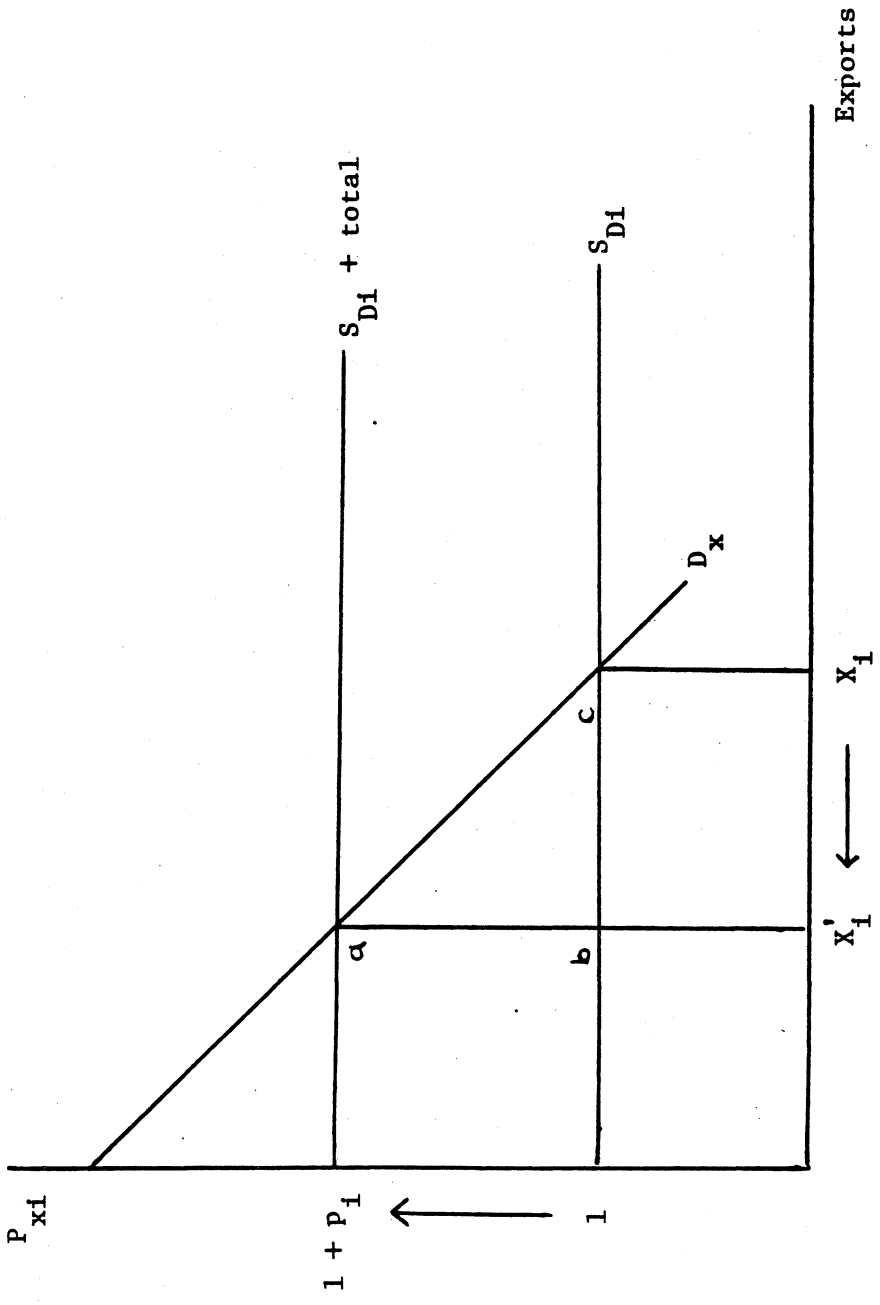


Figure F-1.--Effect of price increase on exports

APPENDIX G

CERTAIN STEEL PRODUCTS FROM BELGIUM, FRANCE, THE FEDERAL REPUBLIC OF GERMANY, ITALY, LUXEMBOURG, THE NETHERLANDS, AND THE UNITED KINGDOM; TERMINATION OF COUNTERVAILING DUTY AND ANTIDUMPING INVESTIGATIONS

Scope of the Investigation

For purposes of this investigation, the term "certain carbon steel pipe and tube products" includes electric resistance welded (ERW) carbon pipes and tubes with walls not thinner than 0.065 inch, of circular cross section, and not over 4.5 inches in outside diameter including cold-rolled pipes and tubes with a wall thickness not exceeding 0.1 inch and ERW carbon pipes and tubes, of square and rectangular cross section, with a wall thickness not less than 0.156 inch, of any diameter, as currently provided for in items 610.3227, 610.3241, 610.3244 and 610.3955 of the *Tariff Schedules of the United States Annotated (TSUSA)*; and ERW carbon pipes and tubes not suitable for use in the manufacture of ball or roller bearings of square and rectangular cross section as currently provided for in TSUSA item 610.4975.

Excluded from this investigation are ERW carbon steel pipes and tubes, suitable for use in boilers, superheaters, heat exchangers, condensers, feedwater heaters, and ball or roller bearings; conforming to A.P.I. specifications for oil well tubing and casing, cold-drawn pipes and tubes, or ERWA carbon steel pipes and tubes imported with couplings.

Allegations of Bounties or Grants

The petition alleges that manufacturers, producers, or exporters of certain pipes and tubes in South Africa benefit from the following bounties or grants: The Iron and Steel Export Promotion Scheme; preferential prices from a government-owned primary steel producer; the South African Department of Industries, Commerce and Tourism's export incentive program, categories A, B, and D; preferential pre- and post-shipment financing for exports; preferential harbor rates, ocean freight rates, and railroad rates; beneficiation investment allowances; and tax incentives for exporters located in certain development areas.

Judith Hippler Bello,

Acting Deputy Assistant Secretary for Import Administration.

October 28, 1982.

[FR Doc. 82-29843 Filed 10-28-82; 8:45]

BILLING CODE 3510-25-M

Washington University; Decision on Application for Duty-Free Entry of Scientific Instrument

The following is a decision on an application for duty-free entry of a scientific instrument pursuant to Section 6(c) of the Educational, Scientific, and Cultural Materials Importation Act of 1966 (Pub. L. 89-651, 80 Stat. 897) and the regulations issued pursuant thereto (15 CFR 301 as amended by 47 FR 32517).

A copy of the record pertaining to this decision is available for public review between 8:30 a.m. and 5:00 p.m. in Room 2097, Statutory Import Programs Staff, U.S. Department of Commerce, 14th and Constitution Avenue, N.W., Washington, D.C. 20230.

Docket No. 82-00243. Applicant: Washington University, Purchasing Dept., Lindell and Skinker Blvd., St. Louis, MO 63130. Instrument: Two Analyser Sections, One GS 61 and One GS 98 Ion Sources with Spare Filaments and Holder. Manufacturer: Institut fur Kristallographie und Petrographie, Switzerland. Intended use of instrument: See Notice on page 30538 in the Federal Register of July 14, 1982.

Comments: No comments have been received with respect to this application. Decision: Application approved. No instrument or apparatus of equivalent scientific value to the foreign instrument, for such purposes as this instrument is intended to be used, is being manufactured in the United States. Reasons: This application is a resubmission of Docket Number 81-00258 which was denied without prejudice to resubmission on March 26, 1982 for informational deficiencies. The foreign instrument with its symetry feature of the source which provides focusing to a point at the exit slit when operated at an emission of 250 microamperes provides a source sensitivity of about four milliamperes per torr. The National Bureau of Standards advises in its memorandum dated September 20, 1982 that (1) the capability of the foreign instrument described above is pertinent to the applicant's intended purpose and (2) it known of no domestic instrument or apparatus of equivalent scientific value to the foreign instrument for the applicant's intended use.

The Department of Commerce knows of no other instrument or apparatus of equivalent scientific value to the foreign instrument, for such purposes as this instrument is intended to be used, which is being manufactured in the United States.

(Catalog of Federal Domestic Assistance Program No. 11.105, Importation of Duty-Free Educational and Scientific Materials)

Richard M. Seppa,

Director, Statutory Import Programs Staff.

[FR Doc. 82-29842 Filed 10-28-82; 8:45 am]

BILLING CODE 3510-25-M

Certain Steel Products From Belgium, France, the Federal Republic of Germany, Italy, Luxembourg, the Netherlands and the United Kingdom; Termination of Countervailing Duty and Antidumping Investigations

AGENCY: International Trade Administration, Commerce.

ACTION: Termination of countervailing duty and antidumping investigations.

SUMMARY: The petitioners the in investigations listed in Appendix I which follows this notice have withdrawn their petitions concerning the certain steel products listed and described in Appendix II to this notice. Therefore, we are terminating these conuntervailing duty and antidumping investigations.

EFFECTIVE DATE: October 29, 1982.

FOR FURTHER INFORMATION CONTACT: David Binder, Office of Investigations, Import Administration, International Trade Administration, United States Department of Commerce, 14th Street & Constitution Avenue, NW., Washington D.C. 20230; telephone: (202) 377-1779.

Case Histories

Countervailing Duty Investigations of Certain Steel Products—Petitions Filed January 11, 1982

On January 11, 1982, we received petitions from the United States Steel Corporation; Bethlehem Steel Corporation; Republic Steel Corporation; Inland Steel Company; Jones & Laughlin Steel, Inc.; National Steel Corporation and Cyclops Corporation filed on behalf of the U.S. industry producing certain carbon steel products. The petitions alleged certain benefits constituting subsidies within the meaning of section 701 of the Tariff Act of 1930, as amended (the Act), were being provided, directly or indirectly, to the manufacturers producers or exporters in certain member states of the European Economic Community (EEC) of the carbon steel products listed and described in Appendices I and II to this notice. We found these petitions contained sufficient grounds upon which to initiate countervailing duty investigations and initiated such investigations on February 1, 1982 (47 FR 5748). On June 10, 1982 we issued our preliminary determinations in these investigations (47 FR 26300). We issued our final determinations on August 24, 1982 (47 FR 39304). These final determinations stated our conclusions that the governments of certain member states of the EEC were providing certain of their manufacturers, producers or

exporters of certain carbon steel products with benefits constituting subsidies within the meaning of the countervailing duty law.

Antidumping Investigations of Certain Steel Products—Petitions Filed January 11, 1982

On January 11, 1982 we received petitions from the United States Steel Corporation and Bethlehem Steel Corporation filed on behalf of the U.S. industry producing certain carbon steel products. The petitions alleged certain carbon steel products from certain member states of the EEC were being, or were likely to be, sold in the United States at less than fair value. After reviewing the petitions, we determined they contained sufficient grounds to initiate antidumping investigations and initiated such investigations on February 1, 1982 (45 FR 5745). On August 9, 1982 we issued our preliminary determinations in these investigations (47 FR 35646). These stated our preliminary conclusions that certain carbon steel products from certain member states of the EEC were being sold, or were likely to be sold, in the United States at less than fair value. Had these investigations continued, we were to have issued our final determinations no later then December 29, 1982.

Countervailing Duty Investigations of Carbon Steel Welded Pipe & Tube—Petitions Filed May 7, 1982

On May 7, 1982 we received a petition from the United States Steel Corporation filed on behalf of the U.S. industry producing carbon steel welded pipe and tube. The petition alleged certain benefits constituting subsidies within the meaning of the Act were being provided, directly or indirectly, to the manufacturers, producers or exporters in certain member states of the EEC of carbon steel welded pipe. We found these petitions contained sufficient grounds upon which to initiate countervailing duty investigations and initiated such investigations on May 27, 1982 (47 FR 24789). On October 4, 1982 we issued our preliminary determinations in these investigations (47 FR 44818). These stated our preliminary conclusions that the benefits provided by the governments of certain EEC member states to certain of their manufacturers, producerss or exporters of carbon steel welded pipe and tube were de minimis. Therefore, we issued negative preliminary determinations. Had these investigations continued, we were to have issued our final determinations no later than December 20, 1982.

Countervailing Duty and Antidumping Investigations of Steel Rails—Petitions Filed September 3, 1982

On September 3, 1982 we received a petition from the CF&I Steel Corporation alleging certain benefits constituting subsidies within the meaning of the Act were being provided, directly or indirectly, to manufacturers, producers or exporters in the EEC of steel rails. The petition also alleged steel rails from certain member states of the EEC were being, or were likely to be, sold in the United States at less than fair value. After reviewing the petition, we determined it contained sufficient grounds to initiate countervailing duty and antidumping investigations and initiated such investigations on September 23, 1982 (47 FR 42744). Had these investigations continued, we were to have issued our preliminary determinations with respect to countervailing duties no later than November 29, 1982 and with respect to antidumping duties no later than February 10, 1982.

On October 21, 1982 representatives of the United States Government and the EEC concluded agreements with respect to imports into the United States of certain steel products from the EEC. The text of these agreements and the annexes thereto are set forth in Appendix III to this notice.

SUPPLEMENTARY INFORMATION:

On October 21, 1982 the petitioners in these investigations notified us they were withdrawing their petitions and requested that the investigations be terminated. Under sections 704(a) (countervailing duties) and 734(a) (antidumping) of the Act, upon withdrawal of a petition, the administering authority may terminate an investigation after giving notice to all parties to the investigation. All parties to these investigations have been notified of petitioners' withdrawals. We have determined termination of these cases is in the public interest.

Customs Officers have been instructed to refund any estimated countervailing or antidumping duties collected and to release any bonds or deposits posted with respect to the certain steel products affected by these terminations.

By virtue of the withdrawal of the petitions and termination of these investigations, all the preliminary determinations and conclusions reached in all those investigations in which we had not yet issued a final determination as to whether the products under investigation benefit from subsidies or are sold at less than fair value are henceforth without legal force or effect.

Gary N. Horlick,

Deputy Assistant Secretary For Import Administration.

October 21, 1982.

Appendix I.—Countervailing Duty (CVD) and Antidumping (AD) Petitions Withdrawn

—CVD petitions, filed on January 11, 1982, by (1) United States Steel Corporation, (2) Bethlehem Steel Corporation (3) Republic Steel Corporation; Inland Steel Company; Jones & Laughlin Steel, Inc., National Steel Corporation, and Cyclops Corporation concerning certain steel products from Belgium, France, the Federal Republic of Germany, Italy, Luxembourg, the Netherlands, the United Kingdom, and the European Communities.

—AD petitions, filed on January 11, 1982, by (1) United States Steel Corporation, and (2) Bethlehem Steel Corporation concerning certain steel products from Belgium, France, the Federal Republic of Germany, Italy, Luxembourg, the Netherlands, and the United Kingdom.

—CVD petitions, filed on May 7, 1982, by United States Steel Corporation concerning carbon steel welded pipe and tube from France, the Federal Republic of Germany and Italy.

—CVD petition, filed on September 3, 1982, by CF&I Steel Corporation concerning steel rails from the European Communities.

—AD petitions, filed on September 3, 1982, by CF&I Steel Corporation concerning steel rails from France, the Federal Republic of Germany and the United Kingdom.

The individual cases subject to this termination of investigations are:

Product	Country
Steel Rails (AD)	UK, France, FRG.
Steel Rails (CVD)	EEC (France, FRG, Luxembourg, UK).
Hot-Rolled Sheet (AD)	France, Belgium, Italy.
Hot-Rolled Sheet & Strip (AD)	Belgium, FRG, Netherlands.
Cold-Rolled Sheet (AD)	France Netherlands
Cold-Rolled Sheet & Strip (AD)	FRG
Carbon Steel Plate (AD)	Belgium FRG UK
Structurals (AD)	France FRG Luxembourg UK
Carbon Steel Welded Pipe & Tube (CVD).	France, FRG.
Carbon Steel Plate (CVD)	Belgium, France, UK.
Hot-Rolled Carbon Plate (CVD)	FRG
Structurals (CVD)	Belgium, France, FRG, Luxembourg, UK.
Hot-Rolled Sheet (CVD)	France
Cold-Rolled Sheet (CVD)	France
Hot-Rolled Sheet & Strip (CVD)	Belgium, FRG, Italy.
Cold-Rolled Sheet & Strip (CVD)	FRG, Italy.
Hot-Rolled Carbon Bar (CVD)	UK.
Cold-Rolled Carbon Bar (CVD)	UK.

Appendix II

The following product definitions are taken from the last published Federal Register notice of a determination in the cases subject to this notice of termination.

1. The term *"carbon steel structural shapes"* covers hot-rolled, forged, extruded, or drawn, or cold-formed or cold-finished carbon steel angles, shapes, or sections, not drilled, not punched, and not otherwise advanced, and not conforming completely to the specifications given in the headnotes to Schedule 6, Part 2 of the *Tariff Schedules of the United States Annotated ("TSUSA")*, for blooms, billets, slabs, sheet bars, bars, wire rods, plates, sheets, strip, wire, rails, joint bars, tie plates, or any tubular products set forth in the *TSUSA*, having a maximum cross-sectional dimension of 3 inches or more, as currently provided for in items 609.8005, 609.8015, 609.8035, 609.8041, or 609.8045 of the *TSUSA*. Such products are generally referred to as structural shapes.

2. The term *"hot-rolled carbon steel plate"* covers hot-rolled carbon steel products, whether or not corrugated or crimped; not pickled; not cold-rolled; not in coils; not cut, not pressed, and not stamped to non-rectangular shape; 0.1875 inch or more in thickness and over 8 inches in width; as currently provided for in items 607.6615, or 607.94, of the *Tariff Schedules of the United States Annotated ("TSUSA")*; and hot- or cold-rolled carbon steel plate which has been coated or plated with zinc including any material which has been painted or otherwise covered after having been coated or plated with zinc, as currently provided for in items 608.0710 or 608.11 of the *TSUSA*. Semifinished products of solid rectangular cross section with a width at least four times the thickness in the as cast condition or processed only through primary mill hot rolling are not included.

3. The term *"hot-rolled carbon steel sheet and strip"* covers the following hot-rolled carbon steel products. Hot-rolled carbon steel sheet is a hot-rolled carbon steel product, whether or not corrugated or crimped and whether or not pickled; not cold-rolled; not cut, not pressed, and not stamped to non-rectangular shape; not coated or plated with metal; over 8 inches in width and in coils or if not in coils under 0.1875 inch in thickness and over 12 inches in width; as currently provided for in items 607.6610, 607.6700, 607.8320, 607.8342, or 607.9400 of the *Tariff Schedules of the United States Annotated ("TSUSA")*. *Please note that the definition of hot-rolled carbon steel sheet includes some products classified as "PLATE" in the TSUSA (Items 607.6610 and 607.8320).* Hot-rolled carbon steel strip is a flat-rolled steel product, whether or not corrugated or crimped and whether or not pickled; not cold-rolled, not cut, not pressed, and not stamped to non-rectangular shape; under 0.1875 inch in thickness and not over 12 inches in width; as currently provided for in items 608.1920, 608.2120, or 608.2320 of the *TSUSA*. Hot-rolled carbon steel strip originally rolled less than 12 inches in width and containing over 0.25 percent carbon is not included.

4. The term *"cold-rolled carbon steel sheet and strip"* covers the following cold-rolled carbon steel products. Cold-rolled carbon steel sheet is a cold-rolled carbon steel product, whether or not corrugated or crimped and whether or not pickled; not cut, not pressed, and not stamped to non-rectangular shape; not coated or plated with metal; over 12 inches in width and in coils or if not in coils under 0.1875 inch in thickness; as currently provided for in items 607.8320 or 607.8344 of the *Tariff Schedules of the United States Annotated ("TSUSA")*. *Please note that the definition of cold-rolled carbon steel sheet includes some products classified as "Plate" in the TSUSA (Item 607.8320).* Cold-rolled carbon steel strip is a flat-rolled carbon steel product; cold-rolled, whether or not corrugated or crimped and whether or not pickled; not cut, not pressed, and not stamped to non-rectangular shape; under 0.1875 inch in thickness and over 0.50 inch in width but not over 12 inches in width; as currently provided for in items 608.1940, 608.2140, or 608.2340 of the *TSUSA*. Cold-rolled carbon steel strip originally rolled less than 12 inches in width and containing over 0.25 percent carbon is not included.

5. The term *"galvanized carbon steel sheet"* covers hot- or cold-rolled carbon steel sheet which has been coated or plated with zinc including any material which has been painted or otherwise covered after having been coated or plated with zinc, as currently provided for in items 608.0710, 608.0730, 608.11 or 608.13 of the *Tariff Schedules of the United States Annotated ("TSUSA")*. *Note that the definition of galvanized carbon steel sheet includes some products classified as "Plate" in the TSUSA (Items 608.0710 and 608.11).* Hot- or cold-rolled carbon steel sheet which has been coated or plated with metal other than zinc is not included.

6. The term *"hot-rolled carbon steel bars"* covers hot-rolled carbon steel products of solid section which have cross sections in the shape of circles, segments of circles, ovals, triangles, rectangles, hexagons, or octagons, not cold-formed, and not coated or plated with metal, as currently provided for in items 606.8310, 606.8330, or 606.8350 of the *Tariff Schedules of the United States Annotated*.

7. The term *"hot-rolled alloy steel bars"* covers hot-rolled alloy steel products, other than those of stainless or tool steel, of solid section which have cross sections in the shape of circles, segments of circles, ovals, triangles, rectangles, hexagons, or octagons, not cold-formed, as currently provided for in item 606.97 of the *Tariff Schedules of the United States*.

8. The term *"cold-formed carbon steel bars"* covers cold-formed carbon steel products of solid section which have cross sections in the shape of circles, segments of circles, ovals, triangles, rectangles, hexagons, or octagons, as currently provided for in items 606.8805 or 606.8815 of the *Tariff Schedules of the United States Annotated*.

9. The term *"cold-formed alloy steel bars"* covers cold-formed alloy steel products, other than those of stainless or tool steel, of solid section which have cross sections in the shape of circles, segments of circles, ovals, triangles, rectangles, hexagons, or octagons, as currently provided for in item 608.99 of the *Tariff Schedules of the United States*.

10. The term *"large diameter welded carbon steel pipes and tubes"* covers welded carbon steel pipes and tubes with walls not thinner than 0.065 of an inch of circular cross section and over 16 inches in outside diameter, as currently provided for in items 610.3211 and 610.3251 of the *Tariff Schedules of the United States Annotated (TSUSA)*. Pipes and tubes suitable for use in boilers, superheaters, heat exchangers, condensers, and feedwater heaters, or conforming to A.P.I. specifications for oil well tubing, with or without couplings, cold-drawn pipes and tubes and cold-rolled pipes and tubes with wall thickness not exceeding 0.1 of an inch are *not included*.

11. The term "Steel Rails" covers hot-rolled carbon steel rails and hot-rolled alloy steel rails, whether 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 currently provided for in items 610.2010, 610.2020 and 610.2100 of the *Tariff Schedules of the United States Annotated* ("TSUSA").

Appendix III—Arrangement

Concerning trade in certain steel products between the European Coal

and Steel Community (hereinafter called "the ECSC") and the United States (hereinafter called "the U.S.").

1. *Basis of the Arrangement.* Recognizing the policy of the ECSC of restructuring its steel industry including the progressive elimination of state aids pursuant to the ECSC State Aids Code; recognizing also the process of modernization and structural change in the United States of America (hereinafter called the "USA"); recognizing the importance as concluded by the OECD of restoring the competitiveness of OECD steel industries; and recognizing, therefore, the importance of stability in trade in certain steel products between the European Community (hereinafter called "the Community") and the USA;

The objective of this Arrangement is to give time to permit restructuring and therefore to create a period of trade stability. To this effect the ECSC [1] shall restrain exports to or destined for consumption in the USA of products described in Article 3 (a) originating in the Community (such exports hereinafter called "the Arrangement products") for the period 1st November 1982 to 31st December 1985.

The ECSC shall ensure that in regard to exports effected between 1st August and 31st Octoer 1982, aberrations from seasonal trade patterns of Arrangement products will be accommodated in the ensuing licensing period.

2. *Condition—Withdrawal of petitions; new petitions.* (a) The entry into effect of this Arrangement is conditional upon:

(1) The withdrawal of the petitions and termination of all investigations concerning all countervailing duty and antidumping duty petitions listed in Appendix A at the latest by 21st October 1982; and

(2) Receipt by the U.S. at the same time of an undertaking from all such petitioners not to file any petitions seeking import relief under U.S. law, including countervailing duty, antidumping duty, Section 301 of the Trade Act of 1974 (other than Section 301 petitions relating to third country sales by U.S. exporters) or Section 337 of the Tariff Act of 1930, on the Arrangement products during the period in which this Arrangement is in effect.

(b) If during the period in which the Arrangement is in effect, any such investigations [2] or investigations under Section 201 of the Trade Act of 1974, Section 232 of the Trade Expansion Act of 1962, or Section 301 of the Trade Act of 1974 (other than Section 301 petitions relating to third country sales by U.S. exporters) are initiated or petitions filed or litigation (including antitrust litigation) instituted with respect to the Arrangement products, and the petitioner of litigant is one of those referred to in article 2a), the ECSC shall be entitled to terminate the Arrangement with respect to some or all of the Arrangement products after consultations with the U.S., at the earliest 15 days after such consultations.

If such petitions are filed or litigation commenced by petitioners or litigants other than those referred to in the previous paragraph, or investigations initiated, on any of the Arrangement products, the ECSC shall be entitled to terminate the Arrangement with respect to the Arrangement product which is the subject of the petition, litigation or investigation after consultations with the U.S., at the earliest 15 days after such consultations. In addition, if during the consultations it is determined that the petition, litigation or investigation threatens to impair the attainment of the objectives of the Arrangement, then the ECSC shall be entitled to terminate the Arrangement with respect to some or all Arrangement products, at the earliest 15 days after such consultations.

These consultations will take into account the nature of the petitions or litigation, the identity of the petitioner or litigant, the amount of trade involved, the scope of relief sought, and other relevant factors.

(c) If, during the term of this Arrangement, any of the above mentioned proceedings of litigation is instituted in the USA against certain steel products as defined in Article 3 (b) imported from the Community which are not Arrangement products and which substantially threaten its objective, then the ECSC and the U.S., before taking any other measure, shall consult to consider appropriate remedial measures.

3. *Product description.* (a) The products are:

Hot-rolled sheet and strip
Cold-rolled sheet
Plate
Structurals
Wire rods
Hot-rolled bars
Coated sheet
Tin plate
Rails
Sheet piling

as described and classified in Appendix B by reference to corresponding Tariff Schedules of the United States Annotated (TSUSA) item numbers and EC NIMEXE classification numbers.

(b) For purposes of this Arrangement, the term "certain steel products" refers to the products described in Appendix E.

4. *Export Limits.* (a) For the period 1st November 1982 to 31 December 1983 (hereinafter called "the Initial Period") and thereafter for each of the years 1984 and 1985 export licenses shall be required for the Arrangement products. Such licenses shall be issued to Community exporters for each product in quantities no greater than the following percentages of the projected U.S. Apparent Consumption (hereinafter called "export ceilings") for the relevant period:

Product	Percentage
Hot-rolled sheet and strip	6.81
Cold-rolled sheet	5.11
Plate	5.36
Structurals	8.91
Wire rods	4.29
Hot-rolled bars	2.38
Coated sheet	3.27
Tin plate	2.20
Rails	8.90
Sheet piling	21.85

For the purposes of this Arrangement, "U.S. Apparent Consumption" shall mean shipments (deliveries) minus exports plus imports, as described in Appendix D.

(b) Where Arrangement products imported into the USA are subsequently re-exported therefrom, without having been subject to substantial transformation, the export ceiling for such products for the period corresponding to the time of such re-export shall be increased by the same amount.

(c) For the purposes of this Arrangement the USA shall comprise both the U.S. Customs Territory and U.S. Foreign Trade Zones. In consequence the entry into the U.S. Customs Territory of Arrangement products which have already entered into a Foreign Trade Zone shall not then be again taken into account as imports of Arrangement products.

5. *Calculation and revision of U.S. Apparent Consumption forecast and of export limits.* The U.S., in agreement with the ECSC, will select an independent forecaster which will provide the estimate of U.S. Apparent Consumption for the purposes of this Arrangement.

For the Initial Period, a first projection of the U.S. Apparent Consumption by product will be established as early as possible and in any event before 20th October 1982. A provisional export

[1] To the extent that the Arrangement products are subject to the Treaty establishing the European Economic Community (the EEC), the term "ECSC" should be substituted by "EEC".

[2] With respect to any Section 337 investigation, the parties shall consult to determine the basis for the investigation.

ceiling for each product will then be calculated for that period by multiplying the U.S. Apparent Consumption of each product by the percentage indicated in Article 4 for that product. These figures for projected Apparent Consumption will be revised in December 1982, February, May, August and October of 1983, by the said independent forecaster, and appropriate adjustments will be made to the export ceilings for each product taking into account licenses already issued under Article 4.

The same procedure will be followed to calculate and revise the U.S. Apparent Consumption and export ceilings for 1984 and for 1985, the first projection being established by the independnet forecaster by 1st October of 1983 and 1984, respectively.

In February of each year as from 1984, adjustments to that year's export ceiling for each product will be made for differences between the forecasted U.S. Apparent Consumption and actual U.S. Apparent Consumption of that product in the previous year or (in February 1984) in the Initial Period.

8. *Export Licences and Certificates.* (a) By Decisions and Regulations to be published in the Official Journal of the European Communities the ECSC will require an export licence for all Arrangement products. Such export licences will be issued in a manner that will avoid abnormal concentrations in exports of Arrangement products to the USA taking into account seasonal trade patterns. The ECSC shall take such action, including the imposition of penalties, as may be necessary to make effective the obligations resulting from the export licences. The ECSC will inform the U.S. of any violations concerning the export licences which come to its attention and the action taken with respect thereto.

Export licences will provide that shipment must be made within a period of three months.

Export licences will be issued against the export ceiling for the Initial Period or a specific calendar year as the case may be. Export licences may be used as early as 1st December of the previous year within a limit of eight (8) percent of the ceiling for the given year. Export licences may not be used after 31st December of the year for which they are issued except that licences not so used may be used during the first two months of the following year with a limit of (8) percent of the export ceiling of the previous year or eight (8) percent of eighty-six (86) percent of the export ceiling of the Initial Period, as the case may be.

(b) The ECSC will require that Arrangement products shall be accompanied by a certificate substantially in the form set out in Appendix C, endorsed in relation to such a licence. The U.S. shall require presentation of such certificate as a condition for entry into the USA of the Arrangement products. The U.S. shall prohibit entry of such products not accompanied by such a certificate.

7. *Technical adjustment.* (a) The specific product export ceilings provided for in Article 4 may be adjusted by the ECSC with notice to the U.S. Adjustments to increase the volume of one product must be offset by an equivalent volume reduction for another product for the same period. Notwithstanding the preceding sentences, no adjustment may be made under this paragraph which results in an increase or a decrease in a specific product limitation under Article 4 by more than five (5) percent by volume for the relevant period.

The ECSC and the U.S. may agree to increase the above percentage limit.

(b) Normally, only one change in a specific product export ceiling in a given year or the Initial Period may be made by an adjustment under the preceding paragraph or use of licences in December or January/February under Article 6(a). Accordingly, changes in a given year or the Initial Period by use of more than one of those three provisions may be made only upon agreement between the ECSC and the U.S.

8. *Short supply.* On the occasion of each quarterly consultation provided for in Article 10 the U.S. and the ECSC will examine the supply and demand situation in the USA for each of the products listed in Appendix B. If the U.S. in consultation with the ECSC determines that because of abnormal supply or demand factors, the U.S. steel industry will be unable to meet demand in the USA for a particular product (including substantial objective evidence such as allocation, extended delivery periods, or other relevent factors) an additional tonnage shall be allowed for such product or products by a special issue of licences limited to 10 percent of the ECSC's unadjusted export ceiling for that product or products. In extraordinary circumstances as determined by the allowable level of special licences.

Each authorized special issue export licence and certificate derived therefrom shall be so marked. Each such licence must be used within 180 days after the start of the quarter when that special issue began.

9. *Monitoring.* The ECSC will within one month of each quarter and for the first time by 31st January 1983 supply the U.S. with such non-confidential information on all export licences issued for Arrangement products as is required for the proper functioning of this Arrangement.

The U.S. will collect and transmit quarterly to the ECSC all non-confidential information relating to certificates received during the preceding quarter in respect of the Arrangement products, and relating to actions taken in respect of Arrangement products for violations of customs laws.

10. *General.* Quarterly consultations shall take place between the ECSC and the U.S. on any matter arising out of the operation of the Arrangement. Consultations shall be held at any other time at the request of either the ECSC or the U.S. to discuss any matters including trends in the importation of certain steel products which impair or threaten to impair the attainment of the objectives of this Arrangement.

In particular, if imports from the ECSC of certain steel products other than Arrangement products of of alloy Arrangement products show a significant increase indicating the possibility of diversion of trade from Arrangement products to certain steel products other than Arrangement products or from carbon to alloy within the same Arrangement product, consultations will be held between the U.S. and the ECSC with the objective of preventing such diversion, taking account of the ECSC 1981 U.S. market share levels.

Should these consultations demonstrate that there has indeed been a diversion of trade which is such as to impair the attainment of the objectives of the Arrangement, then within 60 days of the request for consultations both sides will take the necessary measures for the products concerned in order to prevent such a diversion. For alloy Arrangement products, such measures will include the creation of separate products for purposes of Articles 3 and at the 1981 U.S. market share levels. For certain steel products other than Arrangement products, suh measures may include the creation of products for purposes of Articles 3 and 4.

Consultations will also be held if there are indications that imports from third countries are replacing imports from the ECSC.

11. *Scope of the Arrangement.* This Arrangement shall apply to the U.S. Customs Territory (except as otherwise provided in Article 4(c)) and to the territories to which the Treaty establishing the ECSC as presently constituted applies on the conditions laid down in that Treaty.

12. *Notices.* For all purposes hereunder the U.S. and the ECSC shall be represented by and all communications and notices shall be given and addressed to:

For the ECSC

The Commission of the European Communities (Directorates General for External Relations (I) and Internal Market and Industrial Affairs (III)).

Rue de la Loi, 200, 1049 Brussels, Belgium, Tel: 235.11.11, Telex: 21877 COMEU B.

For the U.S.

U.S. Department of Commerce, Deputy Assistant Secretary for Import Administration, International Trade Administration, Washington, D.C. 20230, Tel: 202/377-1780, Telex: 892536 USDOC WSH DAS/IA/ITA.

Appendix A.—List of Countervailing Duty (CVD) and Antidumping Duty (AD) Petitions [1] to be Withdrawn

CVD petitions, filed on January 11, 1982, by (1) United States Steel Corporation, (2) Bethlehem Steel Corporation, and (3) Republic Steel Corporation, Inland Steel Company, Jones & Laughlin Steel, Inc., National Steel Corporation, and Cyclops Corporation concerning certain steel products from Belgium, France, the Federal Republic of Germany, Italy, Luxembourg, the Netherlands, the United Kingdom, and the European Communities.

AD petitions, filed on January 11, 1982, by (1) United States Steel Corporation, and (2) Bethlehem Steel Corporation concerning certain steel products from Belgium, France, the Federal Republic of Germany, Italy, Luxembourg, the Netherlands, and the United Kingdom.

CVD petitions, filed on February 8, 1982, by Atlantic Steel Corporation, Georgetown Steel Corporation, Georgetown Texas Steel Corporation, Keystone Consolidated, Inc., Korf Industries, Inc., Penn Dixie Steel Corporation and Raritan River Steel Company concerning carbon steel wire rod from Belgium and France.

CVD petitions, filed on May 7, 1982, by United States Steel Corporation concerning carbon steel welded pipe from France, the Federal Republic of Germany and Italy.

CVD petition, filed on September 3, 1982, by CF & I Steel Corporation concerning steel rails from the European Communities.

AD petitions, filed on September 3, 1982, by CF & I Steel Corporation concerning steel rails from France, the Federal Repbulic of Germany and the United Kingdom.

[1] For purposes of this Arrangement, the term "petitions" covers all matters included in the petitions filed on the dates listed, whether or not the DOC initiated investigations on the products or countries concerned.

APPENDIX B—PRODUCT COVERAGE

Description	NIMEXE No.[1]	TSUSA Nos.
Hot Rolled Carbon Steel Sheet and Strip.	73.08–03, 73.08–05, 73.08–07, 73.08–21, 73.08–25, 73.08–29, 73.08–41, 73.08–45, 73.08–49, 73.12–19, 73.13–21, 73.18–23, 73.13–25, 73.13–32, 73.13–34, 73.13–36, 73.62–10, 73.64–20, 73.65–23, 73.65–25.	607.6610, 607.6700, 607.8342, 608.1920, 608.2120, 608.2320.
Hot Rolled Alloy Steel Sheet and Strip.	73.72–19, 73.74–29, 73.75–34, 73.75–39, 73.75–44, 73.75–49.	607.8100, [3]608.3820, [3]608.5520, [3]608.6720.
Cold Rolled Carbon Steel Sheet.	[3]73.12–29, 73.13–41, 73.13–43, 73.13–45, 73.13–47, 73.13–49, 73.13–60, [3]73.64–60, 73.65–63, 73.65–65.	607.8320, 607.8344.
Cold Rolled Alloy Steel Sheet.	[3]73.74–64, [3]73.74–69, 73.75–64, 73.75–69, 73.75–84, 73.75–89.	607.8330.
Carbon Steel Plate.	73.08–00, 73.13–17, 73.13–19, 73.13–78, 73.13–79, 73.63–30, 73.64–72, 73.64–75, 73.66–21.	[4]607.6615, 607.8400, 608.0710, 608.1100.
Alloy Steel Plate.	73.72–39, 73.75–24, 73.75–29.	[4]607.7800, 607.9100, 608.1420.

APPENDIX B—PRODUCT COVERAGE—Continued

Description	NIMEXE No.[1]	TSUSA Nos.
Carbon Coated Sheet (Galvanized Carbon Steel Sheet and Other Carbon Coated Sheet).	[3]73.12–40, [3]73.12–61, [3]73.12–63, [3]73.12–71, [3]73.12–75, [3]73.12–88, 73.13–67, 73.13–68, 73.13–72, 73.13–88, [3]73.64–79, 73.65–70.	608.0730, 608.1300.
Alloy Coated Sheet and Terne, Plate and Sheet.	[3]73.12–65, 73.13–74, [3]73.74–72, [3]73.74–74, [3]73.74–89, 73.75–78.	608.0100, 608.1440.
Tinplate (not including blackplate).	[3]73.12–51, 73.12–59, 73.13–64, 73.13–65.	607.9600, 607.9700, 607.9900.
Carbon Steel Structural Shapes.	73.11–12, 73.11–14, 73.11–16, 73.11–19, 73.11–20, 73.11–31, 73.11–39, 73.63–10, [5]73.63–29, 73.63–50.	609.8005, 609.8015, 609.8035, 609.8041, 609.8045.
Alloy Steel Structural Shapes.	[5]73.73–14, [5]73.73–19, [5]73.73–34, [5]73.73–35, [5]73.73–36, [5]73.73–39, 73.73–49, 73.73–64, [5]73.73–55, 73.73–59.	609.8200.
Carbon Wire Rod.	73.10–11, [6]73.10–16, 73.63–21, [6]73.63–29, [7]73.73–25, [7]73.73–35.	607.1400, 607.1700, 607.2200, 607.2300.
Hot Rolled Carbon Steel Bar.	[8]73.10–16, [9]73.10–42, [10]73.10–49, [11]73.63–29, [9]73.63–72, [10]73.63–79, [12]73.73–35.	606.8310, 606.8330, 606.8350.
Hot Rolled Alloy Bar.	[13]73.73–34, [13]73.73–35, [13]73.73–36, [13]73.73–39, [9]73.73–72, [10]73.73–89.	606.9700.
Carbon and Alloy Rails.	73.16–11, 73.16–14, 73.16–16, 73.16–17, 73.16–20.	610.2010, 610.2020, 610.2100.
Carbon and Alloy Sheet Piling.	73.11–50	609.9600, 609.9800.

[1] Subject to further verifications and amendments to be agreed upon by experts of both parties before 1st November 1982.

[2] Covered if hot rolled.

[3] Covered if over 12" in width.

[4] Excluding semifinished products over 6 inches in thickness produced by rolling on a primary (slabbing) mill.

[5] Covered if structural shapes.

[6] Covered if coiled bar from 13 to 18.8 mm diameter.

[7] Covered if contains up to 0.35 percent lead or sulfur.

[8] Excluding coiled bar from 13 to 18.8 mm diameter.

[9] Not covered if coated, plated or clad.

[10] Excluded if cold finished.

[11] Covered if hot rolled bar, excluding coiled bar from 13 to 18.8 mm diameter.

[12] Covered if hot rolled bar.

[13] Covered if hot rolled bar, and 0.35 percent or more lead or sulfur.

BILLING CODE 3510-25-M

Appendix C: Prototype Export Certificate

EUROPEAN COMMUNITY

Exporter (full name and address)	C E R T I F I C A T E FOR THE EXPORT OF STEEL PRODUCTS TO THE UNITED STATES OF AMERICA No 000000
Consignee (full name and address)	3 Export licence No / Issued in
	4 Extract No / Issued in of export licence No / Issued in

NOTES

. This certificate must be completed on typewriter.

. This certificate and the export licence or the extract thereof to which it refers must be produced at the Customs office at which Customs formalities for export to the United States of America are completed.

. This certificate duly endorsed by the Customs office shown in box no. 7, must be produced to the competent authorities in the United States of America at the time of importation.

Marks and numbers - Number and kind of packages - Category and Description of steel products	6 Quantity

ENDORSEMENT BY THE COMPETENT CUSTOMS OFFICE IN THE EUROPEAN COMMUNITY

The net mass (weight) of steel products shown in box no 6 has been attributed ☐ to the export licence shown in box no 3 ☐ to the extract shown in box no (1)

Customs export document:
type:

number:

Signature:

Stamp:

BILLING CODE 3510-25-C

APPENDIX D.—CONCORDANCE BETWEEN SHIPMENT, IMPORT AND EXPORT CATEGORIES FOR SELECTED GROUPS OF STEEL MILL PRODUCTS

Product	1966–81 shipments (AISI–10)	1979–81 exports (schedule 6's)	1981 imports (TSUSA's)
1. HR carbon sheet and strip	Cat. 31, 36 (carbon only)	608.8610, 608.0910	607.8610, 607.8700, 607.8342, 608.1920, 608.2120, 608.2320.
HR alloy sheet and strip	Cat. 31, 36 (alloy only)	608.8620, 608.0920	607.8100, 608.3820, (HR only), 608.5520, (HR only), 608.6720, (HR only).
2. CR Carbon sheet	Cat. 32 (carbon only)	608.9120	607.8344, 607.8320.
CR alloy sheet	Cat. 32 (alloy only)	608.9135	607.9320.
3. Carbon plate	Cat. 6 (carbon only)	608.8112	607.8615 [1], 607.9400, 608.0710, 608.1100.
Alloy plate	Cat. 6 (alloy only)	608.8121	607.7800 [1], 607.9100, 608.1420.
4. Carbon structural shapes	Cat. 4 (carbon only)	608.8110, 608.8120	608.8005, 608.8015, 608.8035, 608.8041, 608.8045, 608.8200.
Alloy structural shapes	Cat. 4 (alloy only)	608.8130	
5. Carbon wire rods	Cat. 3 (carbon only)	608.7400	607.1400, 607.1700, 607.2200, 607.2300.
6. HR carbon bar	Cat. 14 (carbon only)	608.4310	608.8310, 608.8330, 608.8360.
HR alloy bar	Cat. 14 (alloy only)	608.4340	608.9700.
7. Carbon and alloy cleaned sheet and tame plate and sheet.	Cat. 33A, 33B, 34	608.1605, 608.1620, 608.1625, 608.1615	608.0100, 608.0730, 608.1300, 608.1440.
8. Tin plate	Cat. 29	608.1613, 608.1610	607.9800, 607.9700, 607.9900.
9. Carbon and alloy rails	Cat. 7, 8	610.2205, 610.2215	610.2010, 610.2020, 610.2100.
10. Carbon and alloy sheet piling	Cat. 5	609.9700	609.9600, 609.9900.

[1] Excluding semifinished products over 6 inches in thickness produced by rolling on a primary (slabbing) mill.

Appendix E

"Certain Steel Products" Definition

"Certain steel products" means all products included in the 1982 AISI import categories 1 through 38 excluding categories 14 through 19 (inclusive) and also excluding the following TSUSA item numbers:

606.8620	608.3020
607.2800	608.3320
607.2800	607.7205
607.3200	607.8800
607.3405	607.7220
607.3420	607.7610
607.4300	607.9010
607.4600	607.8805
607.4800	607.8600
607.5405	607.8820
607.5420	607.9020
607.7605	607.9315
607.9005	608.2800
608.9005	608.2900
608.9505	608.3100
608.9105	608.3405
608.9300	608.3420
608.9620	608.3810
608.9535	608.4300
608.9010	608.4700
608.9510	608.4905
608.9110	608.4620
608.9400	608.5510 98.5510
608.9525	608.5700
608.9540	608.5900
608.4510	608.6405
608.4520	608.6420
608.4540	608.6710
608.4550	

[FR Doc. 82–28511 Filed 10–28–82; 8:45 am]

BILLING CODE 3510–25–M

Gulf of Mexico Fishery Management Council's Scientific and Statistical Committee; Public Meeting

AGENCY: National Marine Fisheries Service, NOAA, Commerce.

ACTION: Notice.

SUMMARY: The Gulf of Mexico Fishery Management Council, established by Section 302 of the Magnuson Fishery Conservation and Management Act (Pub. L. 94–265), has established a Scientific and Statistial Committee which will meet to review an amendment to the Shrimp Fishery Management Plan (FMP) and review a draft Calico Scallop FMP.

DATES: The public meeting will convene on Tuesday, November 30, 1982, at approximately 8 a.m. and will adjourn at approximately 4 p.m.

ADDRESS: The public meeting will take place at the Barclay Airport Inn-Best Western, Tampa Room, 5303 West Kennedy Boulevard, Tampa, Florida.

FOR FURTHER INFORMATION CONTACT: Gulf of Mexico Fishery Management Council, Lincoln Center, Suite 881, 5401 West Kennedy Boulevard, Tampa, Florida 33609; Telephone (813) 228–2815.

Dated: October 26, 1982.

Jack L. Falla,

Chief, Administrative Support Staff, National Marine Fisheries Service.

[FR Doc. 82–29941 Filed 10–28–82; 8:45 am]

BILLING CODE 3510–22–M

National Oceanic and Atmospheric Administration

Taking of Marine Mammals; Issuance of Permit

On September 8, 1982, Notice was published in the Federal Register (47 FR 39559), that an application had been filed with the National Marine Fisheries Service by Marineland Amusements Corporation, P.O. Box 937, 6610 Palos Verdes Drive South, Rancho Palos Verdes, California 90274 for a permit to take six (6) Atlantic bottlenose dolphins (*Tursiops truncatus*) for the purpose of public display.

Notice is hereby given that on October 22, 1982, and as authorized by the provisions of the Marine Mammal Protection Act of 1972 (16 U.S.C. 1361–1407), the National Marine Fisheries Service issued a Public Display Permit for the above taking to Marineland Amusements Corporation, subject to certain conditions set forth therein.

The Permit is available for review in the following offices:

Assistant Administrator for Fisheries, National Marine Fisheries Service, 3300 Whitehaven Street, N.W. Washington, D.C.;

Regional Director, National Marine Fisheries Service, Southwest Region, 300 South Ferry Street, Terminal Island, California 90731; and

Regional Director, National Marine Fisheries Service, Southeast Region, 9450 Koger Boulevard, St. Petersburg, Florida 33702.

Dated: October 22, 1982.

Richard B. Roe,

Acting Director, Office of Marine Mammals and Endangred Species, National Marine Fisheries Service.

[FR Doc. 82–29939 Filed 10–28–82; 8:45 am]

BILLING CODE 3510–22–M

Western Pacific Fishery Management Council; Public Meeting With a Partially Closed Session

AGENCY: National Marine Fisheries Service, NOAA, Commerce.

ACTION: Notice of public meeting with a partially closed session.

SUMMARY: As required by the Federal Advisory Committee Act, this notice sets forth the schedule and proposed agendas of the forthcoming public meeting with a partially closed session of the Western Pacific Fishery Management Council, established by Section 302 of the Magnuson Fishery

APPENDIX H

STEEL IMPORT RELIEF DETERMINATION: MEMORANDUM OF SEPTEMBER 18, 1984

Federal Register
Vol. 49, No. 184
Thursday, September 20, 1984

Presidential Documents

Title 3—

The President

Memorandum of September 18, 1984

Steel Import Relief Determination

Memorandum for the United States Trade Representative

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:

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 antidumping, 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

THE WHITE HOUSE,
Washington, September 18, 1984.

[FR Doc. 84-25181
Filed 9-18-84; 4:40 pm]
Billing code 3195-01-M

Editorial note: The text of identical letters, dated Sept. 18, 1984, to the Speaker of the House of Representatives and the President of the Senate on the import relief determination is printed in the *Weekly Compilation of Presidential Documents* (vol. 20, no. 38).

APPENDIX I

IMPORT RESTRAINT ARRANGEMENT LEVELS BY COUNTRY AND PRODUCT CATEGORY

Table I-1.--Import restraint arrangements: Selected countries' share of U.S. apparent supply, 1984 import penetration, arrangement levels

Product	Item	Australia	Brazil	Finland 1/	Mexico	South Africa	Korea	Spain	Japan	Total 2/
Sheets/Strip	1984	0.33	1.16	0.30	0.35	0.48	1.59	0.75	6.8	11.79
	Agree	.35	.74	.23	.14	.34	1.35	.34	5.57	9.0
Plates	1984	.02	.85	1.91	1.05	1.56	1.24	3.06	.74	10.63
	Agree	.08	.93	1.40	.32	.94	1.06	1.23	.60	6.56
Pipe & Tubing	1984	.21	3.40	.12	2.98	.57	9.56	2.31	14.26	33.41
	Agree	.16	1.59	.10	1.33	.55	7.67	.89	13.26	25.5
Bars	1984	.00	2.15	.01	.50	.11	0.73	1.08	1.68	6.27
	Agree	.05	.63	.04	.13	.09	.58	.40	1.50	3.42
Structurals	1984	.01	.40	.00	.67	1.36	2.01	3.01	10.50	17.96
	Agree	.05	.23	3/	.21	.81	1.19	2.01	8.52	13.02
Wire/Wire Prods.	1984	.07	1.21	.18	1.96	.54	4.04	2.66	8.19	19.35
	Agree	.05	1.05	.04	.90	.53	2.04	1.20	6.71	12.86
Total	1984	.20	1.42	.30	.83	.59	2.48	1.45	6.94	14.28
	Agree	.18	.80	.224	.36	.42	1.90	.67	5.80	10.38

1/ Quota product shares only.
2/ Total includes Czechoslovakia.
3/ Not available.

Source: U.S. Department of Commerce.

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Table I-2.--Import restraint arrangements: Restraint levels by country and product, initial period, 1986, 1987, 1988, and end period

(In short tons)

Product categories	Initial period	1986	1987	1988	End period
			Czechoslovakia		
Hot-rolled sheet and plate	18,000	13,000	13,000	13,000	9,250
Other sheet and strip	2,000	5,000	5,000	5,000	3,750
Wire rod	21,000	16,000	16,000	16,000	12,000
All other steel products	9,000	6,000	6,000	6,000	5,000
Total	50,000	40,000	40,000	40,000	30,000
			East Germany		
Cold-rolled sheet and strip	30,000	35,000	40,000	40,000	30,000
Galvanized sheet	10,000	20,000	20,000	20,000	15,000
Plate	80,000	18,000	18,000	18,000	13,000
Wire rod	27,000	11,500	17,000	17,000	12,750
All other steel products	3,000	13,000	15,000	15,000	11,750
Total	150,000	97,500	110,000	110,000	82,500
			Hungary		
Hot-rolled sheet and strip	37,500	30,000	30,000	30,000	22,500
Plate	12,500	10,000	10,000	10,000	7,500
All other steel products	18,750	15,000	15,000	15,000	11,250
Total 1/	42,500	34,000	34,000	34,000	25,500
			Poland		
Plate	42,500	31,000	31,000	31,000	23,250
Structurals	20,000	14,200	14,200	14,200	9,900
Rods	5,500	4,400	4,400	4,400	3,300
Barbed wire	2,500	2,000	2,000	2,000	1,500
Nails	29,000	15,000	15,000	15,000	11,000
All other steel products	13,000	23,400	23,400	23,400	18,550
Total	112,500	90,000	90,000	90,000	67,500
			Romania		
Hot-rolled sheet and strip	38,083	2,300	2,300	2,300	1,000
Cold-rolled sheet and strip	1,753	2,000	2,000	2,000	1,000
Other sheet and strip	6,000	4,200	4,200	4,200	3,000
Plate	265,000	63,000	63,000	63,000	46,250
Oil country tubular goods	12,500	11,000	11,000	11,000	8,250
Other pipe and tube	26,300	13,500	13,500	13,500	8,750
All other steel products	10,364	9,000	9,000	9,000	6,750
Total	360,000	105,000	105,000	105,000	75,000

Table I-2.--Import restraint arrangements: Restraint levels by country and product, initial period, 1986, 1987, 1988, and end period--Continued

(In short tons)

Product categories	Initial period	1986	1987	1988	End period
	Venezuela				
Hot-rolled sheet and strip	21,800	46,300	38,000	33,000	25,400
Cold-rolled sheet and strip	22,100	24,100	19,200	16,100	11,500
Coated sheet	32,300	30,300	25,000	19,700	14,700
Wire rod	51,000	3,800	3,100	2,600	2,000
Reinforcing bar	109,000	16,800	13,700	11,700	8,800
Standard pipe	38,000	7,000	5,800	4,900	3,600
Line pipe	79,000	14,100	11,500	9,900	7,300
Oil country tubular goods	45,000	6,000	4,900	4,200	3,200
Other pipe and tube	0	4,400	3,700	3,100	2,300
Other finished steel products	8,100	14,800	14,200	10,300	7,700
Semifinished products	60,000	60,000	60,000	60,000	30,000
Total	466,300	227,600	199,100	175,500	116,500

1/ The total for each period is less than the sum of the product categories. Hungary must reduce tonnage within product categories so that they do not exceed the total tonnage ceilings.

Source: U.S. Department of Commerce.

APPENDIX J

REEXPORT PROVISIONS

Section 3(a) of the Arrangement in the form of an exchange of letters between the European Communities and the United States concerning trade in steel pipes and tubes, Official Journal of the European Communities, vol. 28, No L 9, 1-10-85, p. 2--

> Where pipes and tubes imported into the USA are subsequently re-exported therefrom, without having been subject to substantial transformation, the export limit for such products for the calendar year corresponding to the time of such re-export shall be increased by the same amount upon presentation of documentation of such re-export. (Emphasis supplied.)

Paragraph 2(a) of the Complementary Arrangement in the form of an exchange of letters to the 1982 arrangement concerning trade in certain steel products between the European Communities and the United States of America, Official Journal of the European Communities, vol. 28, No L 215, 8-12-85, p. 2--

> Where complementary Arrangement products imported into the USA are subsequently re-exported therefrom, without having been subject to substantial transformation, the export ceiling for such products shall be increased by the same amount. (Emphasis supplied.)

Article 6 of COMMISSION DECISION No 2304/85/ECSC of 9 August 1985 on the restriction of exports of certain steel products to the United States of America, Official Journal of the European Communities, vol. 28, No L 215, 8-12-85, p. 33--

> Exports to the United States of products which are to be re-exported from the United States in the same state or without having undergone substantial transformation shall be charged against the allocation of the Member State where the license was issued. Upon production to the authorities of such Member State of proof of such re-exportation from the United States, the allocation of that Member State for the period within which such proof is presented shall be increased by the same amount. (Emphasis supplied.)