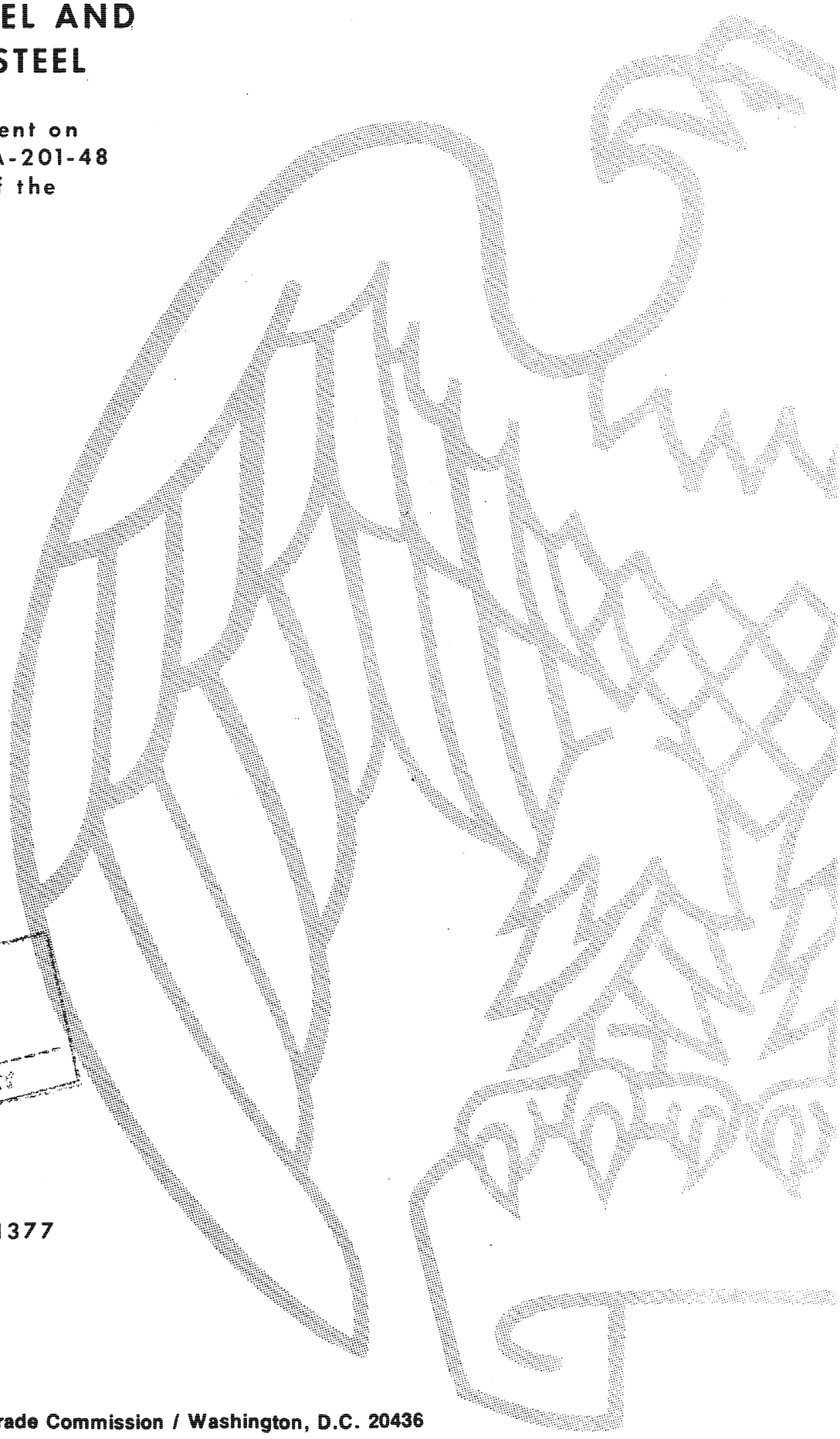
STAINLESS STEEL AND ALLOY TOOL STEEL

Report to the President on
Investigation No. TA-201-48
Under Section 201 of the
Trade Act of 1974



USITC PUBLICATION 1377

MAY 1983

United States International Trade Commission / Washington, D.C. 20436

UNITED STATES INTERNATIONAL TRADE COMMISSION

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Note.--Information which would disclose confidential operations of individual concerns may not be published and therefore has been deleted from this report. These deletions are marked by asterisks.

REPORT TO THE PRESIDENT ON INVESTIGATION NO. TA-201-48,
STAINLESS STEEL AND ALLOY TOOL STEEL

Determination

On the basis of the information developed in the course of investigation No. TA-201-48, the Commission 1/ determines that bars; wire rods; and plates, sheets, and strips, not cut, not pressed, and not stamped to nonrectangular shape; all the foregoing of stainless steel or certain alloy tool steel; and round wire of high speed tool steel, provided for in items 606.90, 606.93, 606.94, 606.95, 607.26, 607.28, 607.34, 607.43, 607.46, 607.54, 607.72, 607.76, 607.88, 607.90, 608.26, 608.29, 608.34, 608.43, 608.49, 608.57, 608.64, and 609.45 of the Tariff Schedules of the United States, are being imported into the United States in such increased quantities as to be a substantial cause of serious injury to the domestic industries producing articles like or directly competitive with the imported articles.

Findings and recommendations

Commissioners Stern and Haggart find and recommend that, in order to remedy the serious injury found to exist--

(1) It is necessary to impose quantitative restrictions for the 3-year period beginning January 1, 1983, as follows--

(a) For stainless steel sheet and strip, 8 percent of forecasted U.S. consumption, but not less than 62,900 short tons;

(b) For stainless steel plate, 10 percent of forecasted U.S. consumption, but not less than 10,700 short tons;

(c) For stainless steel bar, 17 percent of forecasted U.S. consumption, but not less than 27,000 short tons;

1/ Commissioner Stern dissenting with respect to plates.

(d) For stainless steel wire rod, 42 percent of forecasted U.S. consumption, but not less than 19,100 short tons;

(e) For alloy tool steel, 20 percent of forecasted U.S. consumption, but not less than 22,400 short tons.

(2) The following articles should be exempted from any relief-- 2/

(a) Razor blade steel provided for in TSUS item 608.26;

(b) Chipper knife steel provided for in the following items of the TSUSA (Annotated)--

606.9300	607.5405	608.3405
606.9400	607.7205	608.4905
607.3405	607.8805	608.6405

(c) Band saw steel provided for in the following TSUSA items:

606.9520	607.5405	608.3405
606.9525	607.7205	608.4905
607.3405	607.8805	608.6405

(d) The first 6,000 short tons of the following stainless steel sheet, which is provided for in TSUSA item 607.9020--

> Stainless steel sheet not under 0.055 inch and not over 0.065 inch in thickness, not under 25.5 inches and not over 26.25 inches in width, which contains in addition to iron, each of the following elements by weight in the amounts specified and which is certified at the time of entry to be imported for use in the manufacture of stainless-steel-clad aluminum automotive trim:
>
> carbon: not more than 0.12 percent;
>
> chromium: not less than 16 percent nor more than 18 percent;
>
> molybdenum: not less than 0.75 percent nor more than 1.25 percent;

2/ Commissioner Stern further finds that there would be no adverse economic effect on the domestic industries if the following items were to be exempted from relief, providing any necessary adjustments were to be made to the market share quotas and providing that such exemptions be specific to end uses: stainless flapper valve steel, Lummis strip steel, rotor steel for hysteresis motors, grade 253 MA stainless steel, grade 254 SMO stainless steel, and stainless steel sheet 72 to 80 inches in width.

(3) The period 1972-82, exclusive of 1975 and 1982, is the recent period most representative of imports of these articles;

(4) No more than 30 percent of each of the respective aggregate quantities specified in (1), above, for each class of articles may be entered during any calendar quarter; and

(5) In order to provide for a more equitable distribution of imports among supplying countries, the quantities specified in (1), above, for each class of articles should be allocated on a country-by-country basis.

Chairman Eckes finds and recommends that, in order to remedy the serious injury found to exist--

(1) It is necessary to impose quantitative restrictions for the 3-year period beginning January 1, 1983, as follows--

(a) For stainless steel sheet and strip, 7.3 percent of forecasted U.S. consumption, but not less than 56,887 short tons;

(b) For stainless steel plate, 4.8 percent of forecasted U.S. consumption, but not less than 5,919 short tons;

(c) For stainless steel bar, 19.8 percent of forecasted U.S. consumption, but not less than 33,513 short tons;

(d) For stainless steel wire rod, 38.0 percent of forecasted U.S. consumption, but not less than 21,729 short tons;

(e) For alloy tool steel, 26.9 percent of forecasted U.S. consumption, but not less than 29,592 short tons.

(2) The following articles should be exempted from any relief--

(a) Razor blade steel provided for in TSUS item 608.26;

(b) Chipper knife steel provided for in the following items of the TSUSA (Annotated)--

606.9300	607.5405	608.3405
606.9400	607.7205	608.4905
607.3405	607.8805	608.6405

(c) Band saw steel provided for in the following TSUSA items:

606.9520	607.5405	608.3405
606.9525	607.7205	608.4905
607.3405	607.8805	608.6405

(3) The period 1979-81 is the most recent period representative of imports of these articles; and

(4) The quantities of each class of articles should be allocated on a country-by-country basis.

Background

On December 9, 1982, the United States International Trade Commission instituted investigation No. TA-201-48, under section 201(b)(1) of the Trade Act of 1974, to determine whether bars; wire rods; and plates, sheets, and strips, not cut, not pressed, and not stamped to nonrectangular shape; all the foregoing of stainless steel or certain alloy tool steel; and round wire of high speed tool steel, provided for in items 606.90, 606.93, 606.94, 606.95, 607.26, 607.28, 607.34, 607.43, 607.46, 607.54, 607.72, 607.76, 607.88, 607.90, 608.26, 608.29, 608.34, 608.43, 608.49, 608.57, 608.64, and 609.45 of the Tariff Schedules of the United States, are being imported into the United States in such increased quantities as to be a substantial cause of serious injury, or the treat thereof, to the domestic industries producing articles like or directly competitive with the imported articles.

The investigation was instituted following the receipt of a letter on November 23, 1982, from the United States Trade Representative (USTR), requesting an expedited investigation under section 201 concerning imports of certain stainless steel and alloy tool steel products. The USTR's request was in accordance with a determination of the President on November 17, 1982 (47 F.R. 51717), under section 301(a)(2)(A) of the Trade Act of 1974 (19 U.S.C. 2411(a)(2)(A)). The President's action followed the completion of investigations under section 301 of the act initiated by USTR on February 26,

1982 (47 F.R. 10107) and on August 9, 1982 (47 F.R. 36387). These investigations were instituted on the basis of petitions, filed by the Tool and Stainless Steel Industry Committee and the United Steel Workers of America, alleging that the European Community, Belgium, France, Italy, the United Kingdom, Austria, and Sweden had subsidized the production of stainless and alloy tool steel (specialty steel) in a manner inconsistent with their obligations under Articles 8 and 11 of the Agreement on the Interpretation and Application of Articles VI, XVI, and XXIII of the General Agreement on Tariffs and Trade (Subsidies Code).

Notice of the institution of the investigation and the scheduling of a public hearing to be held in connection with the investigation was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, D.C., and by publishing the notice in the Federal Register of December 15, 1982 (47 F.R. 56218). A public hearing was held on February 9-10, 1983, at which time all persons who requested the opportunity were afforded an opportunity to be present, to present evidence, and to be heard. 3/ On March 24, 1983, the Commission, meeting in public session, announced its affirmative injury determination.

As a result of the Commission's affirmative injury determination in this investigation, a public hearing on the subject of remedy recommendations was held on April 5, 1983, at which time all persons who requested the opportunity were afforded an opportunity to be present, to present evidence, and to be

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3/ A transcript of the hearing and copies of briefs submitted by interested parties in connection with the investigation were attached to the original report sent to the President. Copies are available for inspection at the U.S. International Trade Commission, except for material submitted in confidence.

heard. The Commission announced its remedy findings and recommendations in a public meeting held April 27, 1983.

This report is being furnished to the President in accordance with section 201(d)(1) of the Trade Act. The information in the report was obtained from fieldwork and interviews by members of the Commission's staff and from other Federal agencies, responses to Commission questionnaires, information presented at the public hearings, briefs submitted by interested parties, the Commission's files, and other sources.

VIEWS OF THE COMMISSION

Introduction

This investigation is the latest of a series of investigations in which U.S. specialty steel producers have sought relief from imports of specialty steel products pursuant to sections 201 and 203 of the Trade Act of 1974. This particular 201 investigation was not initiated by the domestic producers. Rather, this investigation was instituted on December 9, 1982, following the receipt of a letter from the United States Trade Representative (USTR), requesting an investigation under section 201 of the Trade Act of 1974 on imports of certain stainless steel and alloy tool steel products. 1/ The USTR's request was in accord with a determination of the President following the completion of investigations under section 301 of the Trade Act of 1974.

The domestic producers of specialty steel have stated that they became more competitive through research and investment efforts, steps to improve productivity, and other measures designed to improve their competitive position during the period June 1976 to February 1980 when import relief was last in effect. The domestic specialty steel producers are recognized as being "innovative," "efficient," and "competitive." Nevertheless, the data for 1982 show that the domestic producers' share of the U.S. market has declined, prices have been depressed and suppressed and, as a result, there

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1/ The specific products covered by the request are stainless steel sheet and strip, stainless steel plate, stainless steel bar, stainless steel rod, and alloy tool steel. See Appendix A of the Report for a detailed list of products.

has been a significant idling of productive facilities, a significant decline in employment and hours worked, and the inability of a significant number of firms to operate at a reasonable level of profit. There is no doubt that the recent recession has adversely affected the four domestic industries that have been found to exist, i.e., the stainless steel sheet and strip industry, the stainless steel plate industry, the stainless steel bar and rod industry, and the alloy tool steel industry. Nonetheless, in 1982, imports of the stainless steel and alloy tool steel products subject to this investigation reached their highest recorded levels in the period since 1978 as apparent domestic consumption fell to its lowest level during the same period. We have concluded that increasing imports are a substantial cause of the decline in the condition of the U.S. industries.

In order to remedy the serious injury we have found to exist, we are recommending that the President impose quantitative restrictions on imports based on market shares. We also are recommending that such relief be imposed retroactively 2/ to January 1, 1983, and extend for a period of three years. It is our conviction that the recommended relief will help to insure the competitive posture of the domestic specialty steel industry vis-a-vis their foreign competitors.

Statutory criteria

Section 201(b) of the Trade Act of 1974 3/ provides that three conditions must be satisfied before an affirmative determination can be made:

2/ Commissioner Stern determines with respect to stainless steel plate that imports are an important factor, but not as important as any other cause. See her Views on Stainless Steel Plate which follow, infra.

3/ 19 U.S.C. §2251(b)(1).

(1) an article is being imported in increased quantities (either in actual terms or relative to domestic production);

(2) the domestic industry producing an article like or directly competitive with the imported article must be experiencing serious injury or a threat thereof; and

(3) the increased imports must be a substantial cause of the serious injury or threat thereof to the domestic industry.

For the reasons which follow, we have determined that increased imports of the articles that are the subject of this investigation are a substantial cause of serious injury to the four domestic industries we have found to exist.

Articles subject to investigation

The Commission's Notice of Investigation 4/ defines the imported articles which fall within the scope of this investigaton. In the present case, the scope of investigation covers all or part of 22 different items of the Tariff Schedules of the United States. For purposes of our initial analysis, the imported products under investigation can be combined generally into the following five product groups: (1) stainless steel sheet and strip, (2) stainless steel plate, (3) stainless steel bar, (4) stainless steel wire rod, and (5) alloy tool steel.

Stainless steel is an alloy steel containing, by weight, less than 1 percent of carbon and over 11.5 percent of chromium. 5/ Stainless steel sheet and strip are flat-rolled steel products under 0.1875 inch in thickness produced by passing slabs or sheet bars through a series of reducing rolls on

4/ 47 Fed. Reg. 56218 (1982).
5/ Report at A-6.

continuous or hand mills. Stainless steel sheet and strip are used for such articles as automobiles and food processing and industrial equipment. 6/ 7/

Stainless steel plate is a flat-rolled product, 0.1875 inches or more in thickness. Stainless steel plates are most often used in construction and in industrial equipment for the chemical, oil and gas, and rubber industries. 8/

Stainless steel bars are stainless steel products of solid section, about 0.25 inch to 1.5 inches in diameter, having cross sections in the shapes of circles, triangles, or rectangles, etc. Stainless steel wire rod has an approximately round, solid section, not under 0.20 inch or over 0.74 inch in diameter. Stainless steel bars are used for such applications as industrial fasteners, fittings, valves, medical and dental instruments, automotive parts, and flatware. Stainless steel wire rod is used to make such items as wire, industrial fasteners, medical and dental instruments, and orthodontic devices. 9/

Alloy tool steel products have a different chemical composition from stainless steel and contain certain of the following elements: carbon, chromium, manganese, molybdenum, and tungsten. 10/ All tool steels share the ability to resist wear and softening at elevated temperatures, and a combination of strength and ductility.

6/ Id. at A-7.

7/ Razor blade steel and 434 cladding grade steel sheet are defined as stainless steel sheet and strip. Id. at A-6, A-58. The Commission has been requested by the USTR to provide advice on the impact of exempting these two products from any recommended relief. Exemptions are discussed in our respective remedy recommendations.

8/ Report at A-7.

9/ Id. at A-8.

10/ Id.

Alloy tool steel is made in various forms including sheet, strip, plate, bar and wire rod, but the large majority of all tool steel shipments are bar and wire rod. 11/ There are a large number of different types and grades of alloy tool steel products. Because the applications of alloy tool steel are so specialized, it cannot be stated that the end use is concentrated in any particular industry. Furthermore, any one industry uses a number of different types and grades of alloy tool steel. 12/

Domestic industry

In analyzing the criteria required by section 201, it is first necessary to define the scope of the domestic industry. Section 201 defines the domestic industry in terms of the domestic producers of "an article like or directly competitive with the imported article." 13/ "Like or directly competitive" is not defined in the statute, but the following guidance is provided in the legislative history accompanying the Trade Act of 1974:

> The words "like" and "directly competitive" as used previously and in this bill, are not to be regarded as synonymous or explanatory of each other, but rather to distinguish between "like" articles and articles which, although not "like", are nevertheless "directly competitive." In such context, "like" articles are those which are substantially identical in inherent or intrinsic characteristics (i.e., materials from which made, appearance, quality, texture, etc.), and "directly competitive" articles are those which, although not substantially identical in their inherent or intrinsic characteristics, are substantially equivalent for commercial

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11/ Alloy tool steel products also include chipper knife steel and band saw steel products. The USTR has requested advice on the impact of exempting these two products from any recommended relief. Id. at A-9-10. Exemptions are discussed in our respective remedy recommendations.

12/ Id. at A-10.

13/ Section 201(b)(1) and (b)(3). There is no consensus among the parties as to the definition of the "like" or "directly competitive" articles.

purposes, that is, are adapted to the same uses and are essentially interchangeable therefor. 14/

The Commission has broad discretion under section 201 in determining what constitutes the domestic industry or industries. The industry should be defined in a manner which allows for a meaningful analysis of the statutory criteria in light of the legislative history of section 201.

Under Section 201, the Commission in defining the domestic industry also considers the facilities, i.e., machines and plants where the domestic articles are produced, as well as the workers employed in these facilities. According to the House Report which accompanied the Trade Act of 1974: "[T]he concern of the Tariff Commission would be with the question of serious injury to the productive resources (e.g., employees, physical facilities, and capital) employed in the divisions or plants in which the article in question is produced." 15/

The domestic producers have argued that the domestic industry should be defined to include all domestic producers of stainless steel and alloy tool steel products. The domestic producers have stated that the five product groups covered in this investigation are not "directly competitive" with each other, 16/ but assert that a single industry definition can be based exclusively on the "like" product criterion of the statute. The basis for their assertion is that the concept of "like" is distinct from the concept of

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14/ H.R. Rep. No. 93-571, 93 Cong., 1st Sess. 45 (1973); S. Rep. No. 93-1298, 93d Cong., 2d Sess. 122 (1974). These two reports address this issue with virtually identical language.

15/ H. Rep. No. 93-571, supra note 14, at 46.

16/ Hearing transcript at 134-36. For example, a manufacturer of flatware would not use alloy tool steel; nor would a drawer of wire use stainless steel sheet.

"directly competitive" and therefore, reliance on the statutory term "like" is not precluded in instances where articles under investigation may not be "directly competitive."

As noted in the legislative history above, the Commission should consider the inherent and intrinsic characteristics of the domestically produced articles (i.e., materials from which made, appearance, quality, texture, etc.) in determining whether they are "like" the imported articles. The domestic producers have argued, by interpreting these criteria broadly, that all the various stainless steel and alloy tool steel products have the same basic physical properties inasmuch as they have the same metallurgical base and are produced on the same melting, blooming, pressing, and hot-rolling facilities. Consequently, the domestic producers assert there is a single industry consisting of the facilities in the United States devoted to the production of the various stainless and alloy tool steel articles which are the subject of this investigation. In contrast, importers have argued that the five product groups subject to investigation differ substantially in appearance, quality, size, shape, and composition.

Our initial concern is whether domestic producers of alloy tool steel should be considered a distinct industry or part of a broader single industry comprised of all producers of specialty steel products. We conclude that they should be considered a distinct industry because alloy tool steel products have substantially different inherent and intrinsic characteristics than other specialty steel products and are made in different facilities. For example, alloy tool steel has a different chemical composition, superior ductility and hardness, and can resist wear longer than stainless steel. Conversely,

stainless steel has greater resistance to corrosion than alloy tool steel. Although the production process for alloy tool steel products is similar to that of other specialty steel products, alloy stool steel products are generally made on different machines and in different facilities. 17/ Based on the foregoing, we find domestic alloy steel producers to be a distinct industry producing articles which are like the imported alloy tool steel products.

A second issue is whether the domestic producers of the various stainless steel product groups should be considered a single domestic industry producing articles "like" the various imported stainless steel articles. We recognize that all stainless steel products are interrelated to a certain degree and do share certain basic physical properties. For example, these products do have a common metallurgical base and are made from similar combinations of expensive alloy ingredients. However, these products do vary in appearance, size and shape. We determine that the four stainless steel product groups should not be considered substantially identical with all the stainless steel articles under investigation, and have found it appropriate to analyze three stainless steel industries, namely, sheet and strip, plate, and bar and wire rod.

17/ The relatively small quantities of tool steel produced make continuous rolling operations uneconomical. Therefore, tool steel is rolled on hand mills. All tool steel is subjected to numerous grinding, turning, and straightening operations before it is shipped to ensure more exact specifications and performance. Of the 18 firms that produce alloy tool steel products, only 10 produce another product which is subject to this investigation.

In our view, to consider the domestic producers of these various stainless steel products as a single industry which produces articles "like" the imported articles would also not be reflective of current production and marketing practices of the domestic producers. Stainless steel sheet and strip, stainless steel plate, and stainless steel bar and wire rod are all generally produced on different machines and in different facilities. 18/ Both sheet and strip are generally produced on the same machinery and in the same facilities. Although the manufacturing process for stainless steel plate is similar to that of stainless steel sheet and strip, stainless steel plate is generally made in different facilities and on different machinery from sheet and strip. 19/ Stainless steel bar and wire rod are made by a similar manufacturing process, in the same facilities, and on the same machinery. However, stainless steel bar and wire rod are made in separate facilities from stainless steel plate and sheet and strip. In addition to the above, each of the stainless steel products generally is considered a distinct article of trade and is marketed accordingly.

Based on the foregoing, we conclude that it is appropriate to delineate four domestic industries from the universe of domestic stainless steel and

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18/ The trend is for specialty steel producers to concentrate in a relatively few product lines. For example, the largest producers of stainless steel bar and rod products are not major producers of stainless steel sheet and strip. Report at A-14.

19/ Because of changes in technology, certain stainless steel plate products can be made on the same machinery used to make stainless steel sheet and strip. Based on staff conversations with industry sources, only a small percentage of stainless steel plate products are produced on the same machinery used to manufacture stainless steel sheet and strip. Office of Industries memorandum to file, dated May 2, 1983.

alloy tool steel producers. 20/ 21/ Based on the foregoing, we determine that there are four domestic industries producing articles like the imported articles: (1) stainless steel sheet and strip industry, (2) stainless steel plate industry, (3) stainless steel bar and wire rod industry, and (4) alloy tool steel industry. 22/ This determination comports with the realities of current production, business, and marketing practices of the domestic producers.

Increased imports

The first criterion of section 201 requires a finding that the imported articles are being entered in "increased quantities". This increase can be either "actual or relative to domestic production". 23/ The first criterion is clearly met by imports of all four groups of products. 24/

20/ Commission precedent for differentiating among producers of various products within general product category exists. See Stainless Steel and Alloy Tool Steel, Inv. No. TA-201-5, USTIC Pub. 756 (1976).

21/ It has been argued that the Commission's analysis of the domestic industry in prior title VII investigations involving certain stainless steel products should be controlling. The concept of industry employed in section 201 is not the same as that used in the countervailing and antidumping duty provisions of title VII. Title VII is narrowly aimed at remedying the specific advantages imports may be receiving from unfair trade practices. The purpose of section 201 either is to prevent or remedy serious injury to domestic productive resources from all imports. In light of the purpose of section 201 and in contrast to title VII, the sharing of productive processes and facilities is a fundamental concern in defining the scope of the domestic industry under section 201. Issues and facts relevant to the industry question in section 201 cases, however, are not necessarily controlling in title VII cases.

22/ We recognize that the specific products manufactured by each of the four domestic industries are either "like" or "directly competitive" with a corresponding imported article.

23/ Section 201(b)(2)(c).

24/ Aggregate imports of stainless steel increased from about 138,000 short tons, valued at $203 million, in 1978 to 162,000 short tons, valued at $282 million, in 1982.

Each of the four specialty steel product groups shows increasing imports from 1978 to 1982. 25/ Imports of stainless steel sheet and strip increased from 82,000 short tons in 1978 to 87,000 short tons in 1982. Imports of stainless steel plate increased from 11,000 short tons in 1978 to 13,000 short tons in 1982. During the period 1978-1982, imports of stainless steel bar and wire rod increased dramatically from 45,000 short tons in 1978 to 62,000 short tons in 1982. Alloy tool steel imports followed a similar pattern, increasing from 25,000 short tons in 1978 to 40,000 short tons in 1982.

Imports of each of the stainless steel and alloy tool steel product groups have increased relative to domestic production during the period 1978-1982. 26/ As a share of domestic production, imports in 1982 for each of the four product groups were at their highest level during the period 1978-1982. The ratio of imports to production of stainless steel sheet and strip increased from 11.8 percent in 1978 to 17.2 percent in 1982. The ratio for plate increased from 9 percent in 1978 to 13.8 percent in 1982. The ratio for bar and wire rod doubled from 25.6 percent in 1978 to 54.9 percent in 1982. Alloy tool steel imports exhibited the greatest increase, more than tripling from 24.9 percent in 1978 to 85.2 percent in 1982.

Serious injury to the domestic industries

The second criterion of section 201 requires a finding that the domestic industry is seriously injured or threatened with serious injury. Section 201

25/ The importers have argued that the use of the period 1978 to 1982 to measure changes in import levels was inappropriate because import quotas in effect from June 1976 to February 1980 distorted import levels. Since 1980 when quotas were lifted, however, imports of stainless steel and alloy tool steel have shown dramatic increases. Imports in 1982 were either at the highest or one of the highest levels since 1964 for each product group.

26/ The ratio of imports of all stainless steel products to production increased from 13.8 percent in 1978 to 22.7 percent in 1982.

does not define the term "serious injury", but instead provides guidelines in the form of economic factors which the Commission is to take into account. Section 201(b)(2) provides that the Commission is to "take into account all economic factors which it considers relevant, including (but not limited to)--

> (A) with respect to serious injury, the significant idling of productive facilities in the industry, the inability of a significant number of firms to operate at a reasonable level of profit, and significant unemployment or underemployment within the industry 27/

On the basis of the information in this investigation, we have determined that all four domestic industries composed of the producers of stainless steel sheet and strip, stainless steel plate, stainless steel bar and wire rod, and alloy tool steel are seriously injured.

Stainless steel sheet and strip industry.--Production of stainless steel sheet and strip fell from 694,000 short tons in 1978 to 507,000 short tons in 1982. Although capacity increased only slightly from 1978 to 1982, capacity utilization fell from 72.8 percent in 1978 to 46.2 percent in 1982. Shipments also fell from 783,000 short tons in 1978 to 590,000 short tons in 1982. Exports, which had climbed from 36,000 short tons in 1978 to 83,000 short tons in 1980, declined to 26,000 short tons in 1982. During the period 1978-1982, inventories remained significant.

Employment in the sheet and strip industry increased slightly from 8,029 in 1978 to 8,233 in 1979, but then declined to 6,531 in 1982. Hours worked also declined from 16.3 million in 1978 to 9.8 million in 1982. Wages and total compensation declined in 1982 to their lowest point in five years.

27/ Section 201(b)(2). The Senate Finance Committee Report on the bill which became the Trade Act of 1974 stated that these factors were "not intended to be exclusive." S. Rep. No. 93-1298, supra note 14, at 121.

The serious injury to the stainless steel sheet and strip producers is evident, as producers in 1982 sustained their first aggregate operating loss during the period 1978 to 1982. Operating profit increased from $108 million in 1978 to $173 million in 1979 and then in comparison to operating profit in 1978, fell by 84 percent to $17 million in 1981. In 1982, ten producers reported an aggregate operating loss of $14 million. Net sales followed the same trend, increasing from $1.1 billion in 1978 to $1.4 billion in 1979, before dropping by approximately 31 percent to $966 million in 1982, their lowest level in five years.

Stainless steel plate industry.--U.S. production of stainless steel plate increased from 127,000 short tons in 1978 to 143,000 short tons in 1979, declined steadily to 123,000 short tons in 1981, and then dropped sharply to 96,000 short tons in 1982. Although capacity stayed relatively constant from 1978-1982, capacity utilization, after increasing from 57.7 percent in 1978 to 64.5 percent in 1979, declined to 42.6 percent in 1982. Shipments increased from 114,000 short tons in 1978 to 146,000 short tons in 1979 and then declined to 122,000 short tons in 1981. Shipments then plummeted to 98,000 short tons in 1982. Exports increased from 5,000 short tons in 1978 to 16,000 short tons in 1980, and then declined to 5,000 short tons in 1982. At the same time, inventories remained stable.

Employment of production and related workers increased from 1,744 in 1978 to 2,011 in 1979 and then steadily declined to 1,542 in 1982. Hours worked followed the same trend increasing from 3.7 million hours in 1978 to 4.4 million hours in 1979 and then declining to 2.7 million hours in 1982. Wages

and total compensation paid to workers have also declined in 1982 to their lowest point in five years.

As is the case with the stainless steel sheet and strip industry, serious injury to the stainless steel plate industry is most evident in the financial experience of the domestic producers. From 1978 to 1979 operating profits increased from $13.8 million to $24.7 million. Thereafter, profits declined to $15.1 million in 1981 and then became operating losses of $12.5 million in 1982. Net sales also increased by 54 percent from $212 million in 1978 to $326.2 million in 1981, and then dropped by 31 percent to $223.5 million in 1982. The ratio of operating profit (or loss) to net sales also fell from a positive 6.5 percent in 1978 to a negative 5.6 percent in 1982.

Stainless steel bar and wire rod industry.--Serious injury to the domestic stainless steel bar and wire rod industry is also manifest. Production of stainless steel bar and wire rod decreased from 176,000 short tons in 1978 to a five year low of 113,000 short tons in 1982. Capacity stayed relatively stable during the period at approximately 277,000 short tons, but capacity utilization dropped from 64.5 percent in 1978 to 40.5 percent in 1982. Shipments increased from 162,000 short tons in 1978 to 195,000 short tons in 1979 and then declined to 121,000 short tons in 1982. Exports also increased from 5,000 short tons in 1978 to 10,000 short tons in 1980 and then declined to approximately 6,500 short tons in 1982. Inventories, although remaining stable, were at significant levels ranging from 41,000 short tons to 52,000 short tons during the period 1978-1982. Employment increased from 4,327 in 1978 to 4,881 in 1980 and then declined to

3,241 in 1982. Hours worked also dropped from 9.4 million in 1978 to a low of 5.9 million in 1982.

Moreover, net sales, after increasing from $430 million in 1978 to $589 million in 1980, dropped to a five-year low of $409 million in 1982. Operating profit followed the same trend rising from $34 million in 1978 to $54.9 million in 1980 and then dropping to a loss of $24.4 million in 1982. Although the ratio of operating profit (or loss) to net sales fluctuated during the period, the domestic industry experienced substantial losses for the first time in 1982.

Alloy tool steel industry.--The alloy tool steel industry has also suffered serious injury. U.S. production of alloy tool steel increased from 99,000 short tons in 1978 to 102,000 short tons in 1979 and then dropped to a five-year low of 47,000 short tons in 1982. Between 1978 and 1982, capacity decreased from 228,000 short tons to 205,000 short tons. Although capacity declined, capacity utilization fell from 43.5 percent in 1978 to a five year low of 22.8 percent in 1982. Shipments also declined from 92,000 short tons in 1978 to a five year low of 45,000 short tons in 1982. Exports declined to a low of 2,000 short tons in 1982. Inventories also fell, as capacity fell, from an average of 48,000 short tons in the period 1978-1981 to 39,000 short tons in 1982. Employment steadily declined from 3,337 in 1978 to 2,009 in 1982 and hours worked declined from 6.2 million in 1978 to 5.3 million in 1981, and then dropped dramatically to 3.3 million hours in 1982. Wages paid to workers increased from $60 million in 1978 to a five year high of $72 million in 1980 and then declined to a five year low of $48 million in 1982.

The overall profit picture of the alloy tool steel industry best illustrates the magnitude of the serious injury to this industry. During the five-year period 1978-1982, net sales increased from $334 million in 1978 to a five year high of $403.5 million in 1979 and then declined to a five year low of $231.5 million in 1982, a drop of 31 percent as compared with net sales in 1978. Operating profits increased from $32 million in 1978 to $45.5 million in 1979, and then dropped dramatically to operating losses of $16.4 million in 1982. Eleven out of 15 firms operated at a loss in 1982 as compared with five out of 15 in 1981, three out of 15 in 1978, and one out of 15 firms in 1979.

In conclusion, the sharp declines in the performance from 1981 to 1982 culminating in aggregate operating losses in each of the three separate stainless steel industries 28/ and in the alloy tool steel industry demonstrate that each industry is seriously injured.

Substantial cause of serious injury

The third criterion of section 201 requires a finding that the increased imports are a substantial cause of serious injury to the domestic industry. We conclude that increased imports of stainless steel sheet and strip, plate, bar and wire rod, and alloy tool steel are a substantial cause of serious injury to the respective domestic industries. 29/

28/ Serious injury is also manifested in the combined stainless steel industries as a whole, i.e., stainless steel sheet and strip, plate, and bar and wire rod. For the first time in five years, overall stainless steel operations suffered a loss. Profits declined from $278 million in 1979 to $97 million in 1981 and then became an aggregate operating loss of $53 million in 1982. The number of companies reporting operating losses increased from one out of fourteen reporting companies in 1979 to five out of fourteen companies in 1981 and then to eleven out of fourteen companies in 1982.

29/ Commissioner Stern dissents with respect to stainless steel plate. See her Views on Stainless Steel Plate, infra.

The Trade Act of 1974 defines substantial cause and lists factors the Commission is to consider in determining whether increased imports are a substantial cause of serious injury or the threat of serious injury. Section 201(b)(4) defines substantial cause as "a cause which is important and not less than any other cause." Thus, increased imports must be an important cause of injury and at least a cause which is as important as any other cause. Section 201(b)(2)(C) requires the Commission to take into account all economic factors it considers relevant, including--

> an increase in imports (either actual or relative to domestic production) and a decline in the proportion of the domestic market supplied by domestic producers.

The report of the House Committee on Ways and Means further explains the Commission's role:

> It is important to note that the Commission is directed to take into account all economic factors it considers relevant. The committee did not intend that an industry automatically would satisfy the eligibility criteria for import relief by showing that all, or some of the enumerated factors, were present at the time of its petition to the . . . Commission. That is a judgment to be made by the . . . Commission on the basis of all factors it considers relevant. 30/ [Emphasis added.]

In the present case, we have considered a number of possible causes of injury in addition to increased imports. 31/ For instance, the decline in consumption of the four specialty steel products is considered an important cause of serious injury. We conclude, however, that increased imports are a more important cause of serious injury to each of the four industries than any other cause of injury. 32/

30/ H. Rep. No. 93-571, supra note 14, at 47.
31/ Report at A-41-48.
32/ Commissioner Stern dissents with respect to stainless steel plate. See her Views on Stainless Steel Plate, infra.

Both domestic producers and importers have applied the so-called "shift-share" analysis to the facts of this investigation. The "shift-share" analysis employs a mathematical approach designed to measure the effects of both changing import market shares and changing domestic demand on domestic producers' shipments. In our view, this analysis can be a useful tool in quantifying the relationship between changes in the volume of imports and declines in domestic shipments during a period of declining demand. However, like any analysis employing a mathematical approach, the reliability of the results is dependent upon the appropriateness of the data selected. In the present case, opposite conclusions were reached by the parties using shift share analysis because domestic producers and importers selected different reference periods for determining "normal" domestic shipments and non-injurious import market shares. 33/ Shift share analysis compares the effect of imports to the effect of consumption declines, whatever may be the cause of such declines. It has been argued that a decline in consumption should be considered as a single indivisible cause. We do not believe this approach is appropriate in the context of this case. Many potentially independent, fundamental causes, such as technological change or product substitution, or interest rates, may be partially responsible for a decline in demand. Shift-share analysis does not answer the question of whether and how a decline in demand should be allocated to such causes. Thus, its results should not be considered dispositive.

33/ Domestic producers chose base years when import penetration and U.S. producers' shipments were low. Importers, in contrast, chose base years when import penetration and U.S. producers shipments were high.

Furthermore, this type of analysis assumes that the pressure on domestic prices of a change in the volume of U.S. producers' domestic shipments is the same whether the change in volume is the result of a change in demand for the product or an increase in competition from imports. However, particularly in the cases of sheet and strip and plate, we believe that increased competition from imports has had a significant impact on domestic producers' prices in 1982. 34/ Our determinations have, therefore, relied primarily on an analysis of volume and price effects of imports.

The causal relationship between imports and the serious injury to domestic producers can be seen most clearly in different indicia for each industry. The nature of these industries and the responses of domestic producers within each industry to increased competition from imports differ. For the industries producing alloy tool steel and stainless steel bar and rod, the market consists of a wide variety of grades and specifications for many distinct uses. By contrast, production in the stainless steel sheet and strip and plate industries tends to be concentrated in a few high volume grades.

As this distinction would suggest, markets for sheet and strip and plate appear to be more price sensitive than the markets for alloy tool steel and stainless steel bar and rod. 35/ Thus, in the case of the sheet and strip and plate industries, increased competition from imports resulted in significantly lower prices, as well as lower shipment levels for the domestic producers.

34/ See the Commission's discussion under Stainless Steel Sheet and Strip, infra, and Chairman Eckes and Commissioner Haggart's discussion under Stainless Steel Plate, infra. Commissioner Stern dissents from this observation with respect to stainless steel plate. See her Views on Stainless Steel Plate, infra.

35/ Report at A-36-41.

Lower prices and reduced market share severely affected the gross profit levels of the domestic sheet and strip and plate industries in 1982. 36/

In comparison, imports of alloy tool steel and stainless steel bar and rod have injured domestic producers primarily through the displacement of domestic sales which had an adverse effect on profits, employment, and utilization of productive facilities. In addition, but to a lesser degree, increased price competition caused by imports also has had an adverse impact on these industries.

Stainless steel sheet and strip.--Domestic producers' shipments of sheet and strip, after decreasing slightly from 783,000 short tons in 1978 to 759,000 short tons in 1981, declined in 1982 to 590,000 short tons, their lowest point in five years. Meanwhile, imports increased from 82,000 short tons in 1978 to 87,000 short tons in 1982, the highest point in five years. The market penetration rate for sheet and strip also increased from 9.9 percent in 1978 to a significant 13.4 percent in 1982. The ratio of imports to production, after declining from 11.8 percent in 1978 to a five year low of 6.7 percent in 1980, increased to a five year high of 17.2 percent in 1982.

In 1982, the effect of the lower priced imports was especially evident for stainless steel sheet and strip. Imports of stainless steel sheet and strip in 1982 were generally lower priced than the domestic products. 37/ For example, imports of stainless steel sheet and strip were priced from one to 20 percent lower than the U.S. products for certain specifications in grades 300

36/ Report at A-31-33.
37/ Id. at A-37.

and 400. 38/ This had a dramatic impact on U.S. producers' prices because domestic and imported stainless steel sheet and strip are virtually fungible products. In a declining market with a high degree of price sensitivity, the availability of lower priced imports resulted in U.S. producers lowering their prices to prevent greater decreases in their market share, causing price depression in the U.S. market. The average prices of domestic stainless steel sheet and strip declined by 14 percent from July-September 1981 to October-December 1982. This is in sharp contrast to price behavior in 1975 when a severe decline in demand did not result in decreasing prices for domestic sheet and strip. 39/ In 1982, the profitability of the domestic industry was severely affected by the availability of lower-priced imported stainless steel in a declining market. 40/

38/ Stainless steel grades range from the 200 series to the 500 series. The largest volumes of sheet and strip shipments are found in the 300 and 400 grades.

39/ Traditionally, during declines in consumption, it appears that U.S. steel producers have preferred to resist downward price pressures, choosing instead to accept the lower revenues which result from decreased shipments. Counsel for the Swedish producers provided the following perspective on the market behavior of domestic producers:

> The U.S. specialty steel producers prefer to base their prices on long-term cost considerations, rather than considerations of supply and demand . . . On the down side of the business cycle, the efforts of the U.S. producers to maintain prices at levels dictated by fully allocated costs make the U.S. an attractive market. On the up side of the business cycle, other markets become more attractive to foreign producers because U.S. prices rise less. February 22, 1983, posthearing brief of the Swedish Ironmasters Association (JERNKONTORET) at 38.

In previous periods of declining demand, the ability of domestic producers to resist price decreases was a significant factor in moderating declining profits resulting from a fall of shipment levels.

40/ Report at A-31-33.

Stainless steel plate. 41/--From 1978 to 1981, domestic producers' shipments of stainless steel plate increased from 114,000 short tons in 1978 to 122,000 short tons in 1981. Shipments then dropped to 98,000 short tons in 1982, their lowest point in five years. At the same time, imports increased from 11,000 short tons in 1978, to 13,000 short tons in 1982, the highest point in five years. The market penetration rate of imports also increased from 9.2 percent in 1978 to a five year high of 12.3 percent in 1982. The ratio of imports to production also reached a five year high of 13.8 percent in 1982.

More importantly, in comparison to the last severe downturn in demand in 1975 when domestic prices remained stable, domestic prices declined by 11 percent from July-September 1981 to October-December 1982. 42/ Imported stainless steel plate in 1981 sold for an average of 14 percent below the domestic prices and an average of 7 percent below the domestic prices in 1982.

We find that these price differences are significant for a fungible product like stainless steel plate and have caused the significant decreases in domestic prices. Declines in domestic producers' prices as well as declines in shipments caused by increasing imports severely affected the profitability of the industry in 1982. 43/

Stainless steel bar and wire rod.--During a period of sharp decline in demand, bar and wire rod imports have increased their U.S. market share dramatically while domestic producers' shipments of these products have

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41/ Commissioner Stern dissents from this determination. See her Views on Stainless Steel Plate, infra.

42/ See footnote 39, supra.

43/ Report at A-31-33.

decreased. This constitutes strong evidence that imports of bar and wire rod are a substantial cause of serious injury to the domestic industry. The domestic producers' shipments of bar and wire rod increased from 162,000 short tons in 1978 to a five year high of 195.000 short tons in 1979, and then dropped to 121,000 short tons in 1982. Meanwhile, as consumption decreased, imports increased from 45,000 short tons in 1978 to 62,000 short tons in 1982. Imports also steadily increased their market share from approximately 22 percent in 1978 to approximately 35 percent in 1982. The ratio of U.S. imports to production in 1982 was also a record 54.9 percent.

The existence of the requisite causal connection between imports and serious injury is further substantiated by the fact that during 1981-1982 imports of bar and wire rod have continually undersold domestic products, often by substantial margins. 44/ After increasing slightly in the first half of 1980, the average domestic price for bar remained steady through the first half of 1981, increased slightly in September 1981, but then declined by 14 percent in October-December 1982, the lowest point in five years. Importers' average prices for bar remained steady through 1980, but then declined in 1981 and in 1982. As a result, in 1980 imports of bar were generally higher priced than U.S. produced stainless steel bar, but prices for imported bar were 14 percent lower than those of the U.S. product in 1981 and 17 percent lower in 1982. 45/

44/ In 1980 wire rod imports also undersold the domestic products. In 1980, of the three specifications of bar examined, imports in one specification continually undersold the domestic products.

45/ During all of 1982, for example, two grades of imported steel bar undersold the U.S. product by approximately $600 per ton.

After increasing slightly in the first half of 1980, U.S. producers' prices for wire rod decreased steadily from $2,287 per ton in April-June 1980 to $1,754 per ton in October-December 1982, or by 23 percent. After increasing slightly from 1980 to 1981, importers' prices generally declined thereafter to $1,655 per ton in 1982, 21 percent lower than the 1981 level. Importers' average prices of wire rod were also consistently lower than U.S. prices, averaging between 7 and 8 percent below the U.S. price from 1980-1982.

Alloy tool steel.--For alloy tool steel, the volume effect of imports on the domestic market is also striking. Domestic producers' shipments of alloy tool steel increased from 92,000 short tons to a five year high of 96,000 short tons in 1979 and then declined to a five year low of 45,000 short tons in 1982. During the same period, imports increased from 25,000 short tons in 1978 to 40,000 short tons in 1982. The ratio of imports to consumption for alloy tool steel steadily rose from 22 percent in 1978 to 48 percent in 1982. The ratio of imports to production is even more striking steadily rising from 24.9 percent in 1978 to 45.3 percent in 1981, and then jumping to 85.2 percent in 1982. This evidence substantiates the finding that alloy tool steel imports are a substantial cause of serious injury to the domestic industry.

In the last two years, imported tool steel was also generally lower priced than the domestic products by an average of 8 percent in 1981 and an average of 13 percent in 1982. The import/domestic price differential was generally greatest for the cold work specification, averaging 24 percent in 1982. Thus in 1981 and 1982, the average price of the imported cold work grade was generally $1,500 cheaper per ton than the domestic product.

Conclusion

Based on the foregoing, we conclude that increased imports are a substantial cause of serious injury to the four industries we have found to exist, namely, the stainless steel sheet and strip industry, the stainless steel plate industry, 46/ the stainless steel bar and wire rod industry, and the alloy tool steel industry. Our recommendations which follow are designed to remedy the serious injury to these four domestic industries.

46/ Commissioner Stern dissents with respect to stainless steel plate. See her Views on Stainless Steel Plate, infra.

VIEWS OF COMMISSIONER PAULA STERN ON STAINLESS STEEL PLATE

I have joined the majority in finding imports a substantial cause of serious injury to three industries. But with respect to stainless steel plate, I find that imports though important, are not a substantial cause of serious injury. Two other causes have been more important than imports.

I joined the majority's discussion of how increases in import quantity alone have caused serious injury to the industry producing bar and wire rod and the industry producing alloy tool steel. However, in the case of stainless steel plate, these quantity effects are not present in a similar magnitude. Imports of plate are higher than in recent years, but are well below quantities and penetration rates that prevailed in a number of years before quotas were imposed. In addition, the reduction of total plate shipments resulting from falling exports since 1980 is larger than that caused by increasing imports. Imports in 1982 were 10,000 tons above the unusually low 3,000 tons of 1980, but at the same time exports declined from 16,000 tons in 1980 to 5,000 tons in 1982, a decline of 11,000 tons. In addition, nearly two-thirds of the increase in plate imports from 1981 to 1982 were still in importers' inventories and had not entered the general market

by the end of 1982. These imports, therefore, could not have had a serious effect on U.S. producers' shipments, prices, and profits in 1982.

Although the quantity effects of the sheet and strip imports were relatively smaller than those found for the rolled products, I have joined with the majority in finding that the price effects of increased imports on sheet and strip have been sufficient, when considered with the effect of increased quantities, to make imports a substantial cause of injury. However, that is not the case with plate. Although prices have declined since late 1981, there are no strong indications that import prices caused the decline. Even allowing for possible leads and lags between price changes, producers' prices have frequently moved from one quarter to the next in the direction opposite that of importers' prices. And from 1980 to 1981, when the increased imports actually did get sold -- rather than remaining in inventory - producers' and importers' prices increased. Additionally, the data do not suggest that importers have availed themselves of lower prices made possible by changes in exchange rates. While it is true that they have undersold U.S. producers consistently, margins have declined rather than increased -- counter to the trend of an

appreciating dollar for 1981 and 1982. And, in contrast with sheet and strip where both importers' and producers' prices at the end of 1982 were well below 1980 prices, prices of plate ended 1982 at levels similar to or above 1980 with only one exception.

Finally, econometric analysis of supply and demand elasticities by the Commission staff suggests that the percentage response of domestic producers' prices to a particular percentage change in import quantities of plate is far smaller than that for stainless sheet and strip; but the response of plate prices to a given change in demand actually exceeds the response of sheet and strip prices to demand fluctuations. */

Although imports have been a factor in the problems of the U.S. plate producers, the available information suggests that they were less important than other causes of injury. These other causes included an unusual decline in domestic demand and declining exports by U.S. producers. High interest rates during 1982 quashed any chance that the capital goods industries which use plate **/ could maintain the prior level

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*/ See "Memorandum from Director, Office of Economics, to the Commission," EC-G-101 (April 25, 1983), Appendix I at 1.
**/ See Report at A-7.

of consumption. Accordingly, the production of durable manufactures declined by 11 percent and apparent consumption of plate (adjusted for changes in inventory held by both producers and importers) declined by 15 percent. Producers' domestic shipments declined only slightly more than that level, or by less than 17 percent. This close correlation suggests that imports actually had a small effect on the domestic operations of U.S. producers.

The high interest rates are without any doubt a major reason for the overvaluation of the U.S. dollar in the exchange markets, and this overvaluation, along with other factors, has led to the decline in exports from the United States. */ Between 1980 and 1982, the decline in exports was actually greater than the increase in imports of stainless steel plate.

I conclude that the unusual decline in domestic demand as a result of the exceedingly high interest rates has been a cause of injury more important than imports. Furthermore, the decline in U.S. exports was also a more important cause of injury than imports and was perhaps as significant as the

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*/ Injury to overseas sales of U.S. producers (exports) by foreign competition is not remediable under section 201.

exceptional decline in demand. Therefore, imports were not a substantial cause of injury to the domestic industry producing stainless steel plate. Finally, there are no indications that imports will attain greater relevant significance than they have already reached in causing injury to U.S. plate producers. For instance, while importers' inventories of plate increased from 300 short tons in 1981 to 4,000 short tons at year-end 1982, this still represents less than four percent of apparent consumption in that exceedingly low year. */ U.S. producers' inventories, on the other hand, were nearly 17 percent of apparent consumption. Although importers' inventories are clearly higher than normal, they are too small to pose a threat of serious injury. I therefore conclude that they are not, and do not threaten to become, a substantial cause of serious injury.

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*/ In contrast to plate, importers' inventory of alloy tool steel at year-end 1982 was 14 percent of apparent consumption.

COMMISSION REMEDY

Views of Commissioners Paula Stern and Veronica A. Haggart

The purpose of the relief under section 201 is to provide the domestic industry "sufficient time to adjust to freer international competition." 1/ In order to remedy the serious injury to the four domestic industies that we have found to exist and to allow these industries to adjust to competition, 2/ we recommend that the President impose quantitative restrictions based on market shares for a period of three years, effective January 1, 1983, as follows:

Calendar Year	Stainless Steel				Alloy tool steel
	Sheet and strip	Plate 3/	Bar	Rod	
1983-1985	An amount for each calendar year equivalent to the following percentages of forecasted apparent U.S. consumption for that year, but not less than the quantities specified:				
	8%	10%	17%	42%	20%
	62,900 short tons	10,700 short tons	27,000 short tons	19,100 short tons	22,100 short tons

1/ Trade Act of 1974, Report of the Committee on Finance, S. Rep. No. 93-1298, 93rd Cong., 2d Sess. (1974), at 119.

2/ In our remedy recommendation we have considered bar and rod as separate product lines even though we have found that they are produced by one industry. The patterns of consumption, profits, and other economic factors for these two products do not always coincide, and therefore separate remedies for the two types of steel products are more appropriate.

3/ Commissioner Stern notes that she is recommending relief to all four industries (five product groups) because Congress has expressed its desire that the Commission whenever possible achieve consensus in 201 cases. Although imports were not shown to her satisfaction to be most important cause of injury to the plate industry, they played an important role. Her relief recommendation is more stringent for products whose increasing imports have had relatively greater impact and less stringent where increasing imports have played a relatively small role, specifically plate.

The minimum quantities and market shares specified are equal to the averages during the period 1972-82 exclusive of imports in the years 1975 and 1982. 4/ Due to wide fluctuations in import and consumption levels from year to year, we have concluded that there is no recent period which is truly "representative." Selection of a longer period smooths fluctuations due to short-run influences which may not be reflective of past or future market conditions. We have accordingly selected a longer time period which includes two full business cycles and years when imports have been both high and low. The years 1975 and 1982 were not included because these are years in which serious injury has been caused by imports.

We are recommending that these market share quotas be accompanied by quantitative limits in order to assure compliance with Congressional intent under section 203(d)(2) of the statute which provides that any quantitative restriction must permit the entry of at least that quantity of imports entered during the most recent representative period. To insure orderly entry and supply of imports when quotas are in effect, we recommend that no more than 30 percent of each of the respective annual aggregate quantities specified for each class (determined by the specific percentages or minimum quantity, as appropriate) should be entered during any calendar quarter.

Framework of Remedy Analysis

As a preliminary matter, it is necessary to examine the role of imports in the market in order to determine an appropriate remedy. Demand for specialty steel is generally acknowledged to be derived from demand for the

4/ The minimum quantities specified have been adjusted upward to the nearest 100 short tons.

products into which it is ultimately fashioned. The primary users of such steel products are the industries that produce consumer durables and those that produce capital investment goods. Apparent consumption of each of the general categories of steel products has followed a cyclical pattern determined by the user-industry activity and inventory practices. With a recovery in the economy, consumption of each specialty steel product should increase accordingly.

The domestic specialty steel producers are already modern and efficient. Nonetheless, domestic producers no longer appear to be as price competitive with imports as they have been in the past. 5/ The strength of the U.S. dollar relative to the currencies of foreign producers and the effects of recession on the economies of several principal suppliers of specialty steel suggest that imports would remain high and import prices would remain low in the immediate future in the absence of restrictions. Therefore, it appears that the greatest level of protection from imports is necessary in the short term.

Market Share Quotas

We have recommended market share quotas because this form of relief is the most appropriate to remedy the injury caused by imports to the domestic industries. In doing so, we have considered the fact that the specialty steel industries are highly cyclical. Market share quotas are the most appropriate form of remedy to facilitate adjustment to new conditions of competition in a

5/ Commission Stern notes that the present decline in competitiveness of exports by U.S. producers has been an additional source of injury. See her Additional Views, infra.

dynamic market and will provide a basis on which domestic producers can plan investment strategy and cost-cutting measures. The recommended market share quotas will guarantee a minimum market share to U.S. producers and should result in the firming of U.S. producers' prices. Other types of relief, such as tariffs, would not provide the industry with the certainty of protection against both the low prices and the increasing quantities of imported specialty steel. 6/ Furthermore, a tariff remedy may not be flexible enough to be responsive to market changes in a dynamic and cyclical industry. Market share quotas will automatically allow the quantity of imports to adjust to fluctuations in market demand, and should minimize the distortions which might otherwise occur. This arrangement, which will maintain the share of the total market held by imports, is beneficial to both consumers and foreign producers while establishing the stability in the market necessary for the domestic industries to adjust to import competition.

6/ Foreign producers have demonstrated the capability to set their prices well below U.S. producers' prices no matter how far U.S. prices decline. This capability suggests that a large part of any tariff relief could be absorbed by foreign producers thereby limiting its effectiveness.

Forecasting and Quarterly Adjustments

We are recommending that the quotas be based on consumption forecasts rather than on consumption levels from the preceding calendar year. 7/ Forecasts of future consumption and the establishment of the allowable level of imports should be made on a quarterly basis. Testimony presented strongly indicated that under the previous import relief program, the semi-annual restraint periods resulted in substantial instability in the market and led to a build up of inventory in bonded warehouses at the end of each period. By utilizing quaterly forecasts, the level of import restrictions will be more responsive to changes in demand. Finally, appropriate adjustments should be made in the volume of imports permitted in a succeeding quarter to compensate for any forecasting errors.

Representative Period

We have based the recommended market share quotas on average imports of each product in the period 1972-82, excluding the years 1975 and 1982. In choosing this base period, we observe that there exists no recent period truly representative of imports. Since 1970, economic conditions and government actions have caused distortions in the market for specialty steel that make

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7/ The Department of Commerce has provided the Commission staff with projections of 1983 consumption of each type of specialty steel. These projections are based on the econometric model of the specialty steel consumption prepared by Data Resources Inc. (DRI) under contract to Commerce. This is the same model which both the domestic industry and certain importers suggested be used to forecast import levels in the market over time.

each year unusual. 8/ In the early part of the decade, there were price controls and a voluntary restraint arrangement. The latter, imposed initially on all steel products, encouraged imports of high-value specialty steel to increase out of proportion at the expense of lower-valued carbon steel. A steel shortage worldwide in 1974 coincided with the removal of price controls and the market became overheated, only to be followed by a worldwide recession and a period of injurious imports. Quotas were imposed on imports of specialty steel in 1976. During the period 1978 to 1982, the domestic industries and imports were influenced by the following factors: exceptionally high inflation rates, a construction boom, the termination of quotas, a mini-recession, exceptionally low dollar exchange rates, exceptionally high real interest rates, and the nearly complete turn around in both inflation and dollar value in a short time. In light of these problems, which served to distort import levels, we consider a longer, rather than a shorter, time frame to be representative. 9/

Period of Relief

We have determined that these quotas should be imposed retroactively to January 1, 1983 and should remain in effect for three years until December 31, 1985. The retroactive application of the quotas will assure that those products which may have been entered into the United States in excess of market requirements in anticipation of section 201 relief will not have an

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8/ Each of the years between 1970 and 1982 was deemed not to be representative of imports, for one reason or another, by at least one foreign producer. We note, for example, that imports of sheet, strip and plate in 1980 were at their lowest level during the last 10 years.

9/ Commissioner Stern further discusses alternative remedies in her Additional Views.

adverse effect on U.S. producers. 10/ If no such rush to beat the imposition of relief has occurred, the retroactive application of the quotas will not adversely affect foreign suppliers or U.S. customers.

In addition, retroactive quotas will prevent import-induced injury during the period in which the industry is most vulnerable--the trough and the beginning of the upturn of the business cycle. During this period, particularly if foreign economies lag behind the economy of the United States, imports would be expected to continue their injurious behavior by gaining increased sales at low prices. In light of the current condition of the domestic industries, we believe that they must be allowed the opportunity to gain from any initial increase in demand 11/.

Country-by-country allocations.

We have recommended that the quotas be allocated on a country-by-country basis. Based on past experiences, a single global quota without such allocations would create chaotic conditions under which neither the importers nor their customers would be able to operate with certainty. Such a chaotic market could also be detrimental to domestic producers.

10/ Expeditious implementation of retroactive quotas will help to insure the effectiveness of the quotas in 1983 by minimizing the likelihood that any country quota will be exceeded prior to the date of implementation.

11/ Commissioner Haggart notes that, if historical patterns of cyclical demand are repeated, demand for specialty steel products should peak in about three years. The domestic industry asserted that five years of relief was necessary to provide sufficient certainty to insure a continuation of its efforts to maintain its competitive position. If three years of relief proves to be insufficient, domestic producers have the option to petition for extension of the import relief under section 203(i)(3) of the Trade Act of 1974.

We have not recommended the specific allocations to be granted each supplying country. 12/ As guidance to the President, however, we observe that there have been significant shifts of market shares among the principal suppliers of some specialty steel products during recent years. There have also been new entrants into the market that have demonstrated their ability to compete on the basis of comparative advantage and efficient use of resources. Suppliers who have gained market share as a result of fair trade and efficient operation should not be penalized by basing allocations on trade patterns existing too far in the past. 13/

Exemptions

The Commission was requested by the United States Trade Representative (USTR) to examine and provide advice on the impact of exempting from any import relief measures which the Commission may recommend the following products: razor blade steel; chipper knife steel; band saw steel; and grade 434 cold-rolled stainless steel sheet for use in the manufacture of stainless-steel-clad aluminum automotive trim. 14/

In considering these various exemption requests, we remained cognizant of the following points: (1) The U.S. industries are efficient specialty steel producers, and on a par technologically with the most advanced specialty steel industries in the world; (2) Should relief be granted, the U.S. industry has

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12/ We can see no persuasive reason why a country-by-country allocation of the quotas has to be based on the same time period utilized to establish the overall level of imports we have recommended. The issue of the appropriate level of imports does not, in our view, involve the same considerations as the issue of the allocation of imports among supplying countries.

13/ Commissioner Haggart notes that allocations based solely on a recent period, such as 1981 or 1982, might penalize traditional suppliers who have demonstrated consistency, reliabilty, and sensitivity to market conditions.

14/ Attachment 2, which contains a full description of these products, is reproduced in App. A, Report, at A-64.

indicated its intention to develop new alloys and invest in advanced refining equipment; and (3) Many of the exemption requests represented those high quality, high unit-value items which the U.S. industry might seek to develop and market should relief be granted. In short, we had to weigh the exemption requests against not only present U.S. production of these products, but also the possibility that widespread exemption recommendations might thwart the recovery and the further development of the U.S. industry which our relief is designed to promote.

We examined each exemption request in terms of the following criteria:

(1) Whether the product is presently made or has recently been made by U.S. producers;

(2) Whether the product is a necessary article for a particular end use, and has limited or no other applications outside that use;

(3) Whether the product requires special machinery or equipment or expertise to manufacture, and whether it is produced at only a limited number of facilities abroad;

(4) Whether the product represents a small share of U.S.-consumption of the generic product category; and

(5) Whether the product represents a small volume of imports.

These criteria were designed to establish the extent to which each requested product filled a need in the U.S. market that could not be supplied by U.S.-producers, and due to such factors as small volume, unique end-use application, and/or return on investment, would not likely be supplied even if restrictions on imports were put into place.

Exemption recommendations

We have examined the four products upon which the USTR requested we provide advice in light of the criteria set forth above, and have concluded as follows:

(1) Razor blade steel.--We are advising the USTR that razor blade steel be exempted from the relief recommended, and have adjusted the quota for stainless steel sheet and strip accordingly. This product is not produced in the United States, and has not been produced in commercial quantities since the early 1960's, despite periodic solicitations to potential U.S. producers from consuming firms. Razor blade steel is a form of stainless steel strip which requires specific machinery in the rolling process and is relatively costly to produce--hence it is not substitutable in other applications of stainless steel strip. Although the 930 tons imported account for 100 percent of U.S. consumption of razor blade steel, such imports represented only 0.1 percent of total U.S. consumption of stainless steel sheet and strip in 1982, and 1.1 percent of the total imports of stainless steel sheet and strip. This product was exempted in the prior period of relief.

(2) Chipper knife steel.--We are advising the USTR that chipper knife steel be exempted from the relief recommended, and have adjusted the quota for alloy tool steel accordingly. This product has been made periodically by U.S. producers, but can apparently not be supplied in sufficient quantities at a price which is not well in excess of the market price for imports in the U.S. market. Testimony and submissions in the present and former specialty steel investigations indicate that chipper knife steel's unusual chemistry and varied product form make it undesirable for U.S. producers to enter the market. Further testimony cited repeated and unsuccessful efforts by the consumers of this product to attempt to develop domestic sources for the material.

Chipper knife steel's special chemical analysis and varied product forms make it suitable only for the single commercial purpose of manufacturing chipper knives, which are used to chip timber and wood into wood fiber products. Imports of chipper knife steel totaled 1,894 tons in 1982, which represented 2.3 percent of total U.S. consumption of alloy tool steel in that year, and 4.7 percent of total imports of alloy tool steel. This product was exempted in the prior period of relief, beginning in April 1978, following a recommendation by the ITC to the President.

(3) Band saw steel.--We are advising the USTR that band saw steel be exempted from the relief recommended, and have adjusted the quota for alloy tool steel accordingly. This product, also referred to as D6A bandsaw strip, is produced by * * *. Band saw steel's special chemical analysis and product form make its unsuitable for any other application. Imports of band saw

steel were 30 tons in 1982, which represented .04 percent of total U.S. consumption of alloy tool steel in that year, and .07 percent of total imports of alloy tool steel. This product, along with chipper knife steel, was exempted in the prior period of relief, beginning in April 1978, following a recommendation by the ITC to the President.

(4) Cladding grade 434 stainless steel sheet.--We are advising the USTR that cladding grade 434 stainless steel sheet be given a flat yearly exemption of 6,000 short tons, and that imports above that amount be subject to the quantitative restrictions recommended by this Commission.

The Commission has received and has examined an extensive body of testimony and submissions on this product. Cladding grade 434 stainless steel is a unique product, produced by only one foreign firm, and imported into the United States for consumption by only one firm, which clads the stainless steel sheet to aluminum for use as automobile trim. The consuming firm requires a product of high quality, to an exact dimension, and with a minimum of surface imperfection. There are no other applications for this product.

The consuming firm was formerly supplied by a domestic producer of stainless steel sheet, as well as the French producer. The U.S. producing facility, however, was closed in March 1982. Since that time, no U.S. firm has been qualified to be a supplier of this material by the consuming firm. Thus, although there are several U.S. firms which produce grade 434 stainless steel sheet, there are currently no U.S. producers of the type, dimension, and quality of such sheet required by the consuming firm.

Three U.S. firms are presently attempting to qualify material for this market, which represented 1.1 percent of the total stainless steel sheet and strip market, and 6.7 percent of total imports of those products in 1982. All interested parties agree that this product will become an increasingly important one as the domestic automotive market recovers and as that industry places increasing emphasis on corrosion resistence in its products. By the consuming firm's own estimates, its consumption of this product will increase by at least * * * percent in 1983 alone.

We are therefore recommending a flat yearly exemption of 6,000 tons for this product. The consuming firm has indicated that it has in inventory in excess of * * * supply of material, which, when added to the exempted amount will approximate its projected consumption in 1983. Information supplied to the Commission in the present investigation indicates that two, and possibly all three potential U.S. suppliers could qualify before January 1984. The exemption ceiling of 6,000 tons should encourage the expedition of the qualifying process.

Additional Requests for Exemptions from the Parties

In addition to the items listed by USTR, the Commission also received requests from representatives of importers and foreign producers to recommend exemption of certain other stainless steel and alloy tool steel products, 15/ which are allegedly not produced domestically or are produced in such small quantities that their exemptions would not have an adverse impact on the U.S. industry seeking relief.

Accordingly, we are also advising the President that exemption of the following articles will not adversely affect the domestic industry: 16/

(1) Stainless flapper valve steel.--This product is a high-molybdenum grade of stainless steel strip used in the production of flapper valves for air compressors and outboard motors. At present there are no known domestic producers of this product, and three Swedish producers account for 100 percent of imports and U.S. consumption. Imports in 1982 represented less than .02 percent of U.S. consumption of the generic product category, stainless steel sheet and strip, and less than 0.1 percent of total stainless steel sheet and strip imports.

15/ These items, with their respective TSUSA numbers, are as follows: stainless flapper valve steel (608.2900, 608.4300), high-speed tool steel sheet (607.7220, 607.8820), rolled alloy tool steel bar for use as a component in aircraft brake systems (606.9535, 606.9540), ground flat alloy tool steel stock (606.9535, 606.9540), alloy tool steel drill rod, 2" or less in diameter (606.9510), cross-rolled tool steel sheet (607.7220), stainless steel plate and sheet for use in making cutlery or food processing equipment (607.7605, 607.9020), stainless steel press plates (607.7610), lummis strip steel (608.4300), rotor blade steel for hysteresis motors (608.3420, 608.4920), butcher band saw steel (608.4300), stainless surgical knife steel (608.4300), wire rod for bare wire and electrode manufacturing (607.4300), stainless steel plate and sheet in widths of 72-80 inches (607.7605, 607.9020), grade 254 SMO stainless steel covered by U.S. Letters Patent No. 4,078,920, March 14, 1978, (all forms), grade 253 MA stainless steel, covered by U.S. Letters Patent No. 4,224,062, September 23, 1980 (all forms), iron-chromium-aluminum alloys for heating elements (607.2700, 608.5700, 607.4300), chipper 2 knife steel (606.9300, 607.7205), certain alloy H steels (all forms).

16/ Commissioner Haggart notes that although the USTR did not request advice on the impact of exempting these articles, we have obtained certain information during the course of this investigation which the USTR may wish to consider. However, the six articles discussed above are imported from one country, namely Sweden, and involve relatively small quantities. Therefore, if the Commission's advice to allocate quotas on a country-by-country basis is followed, this would obviate the need for exemption. In addition, exemption of these products may involve certain Customs classification problems and therefore, exemption may not be administratively feasible.

(2) Lummis strip steel.--This product is a stainless steel strip product, made to individual specification, which is manufactured into blades for the cutting of polyester fabric. No U.S. producers make material to the close metallurgical and physical properties required by the end-users. One Swedish producer accounts for 100 percent of the imports and consumption of this item. Imports in 1982 represented less than .01 percent of both U.S. consumption and U.S. imports of stainless steel sheet and strip.

(3) Rotor steel for hysteresis motors.--This product is a form of tool steel strip, which is used for a non-tool steel application--i.e., in the manufacture of rotor rings in certain electrical motors. The product is presently not produced in the United States, and one Swedish producer accounts for 100 percent of imports and U.S. consumption of this item. Imports in 1982 represented less than .02 percent of U.S. consumption of the generic product category, alloy tool steel, and less than .03 percent of total imports of alloy tool steel.

(4) Grade 253 MA stainless.--This product is a proprietary grade of stainless steel, which is produced in all product forms subject to this investigation. There is at present no potential U.S. production, as the patent is held by a Swedish producer, who developed the grade. Although classified for tariff purposes as a stainless steel, its use is limited to narrow high-temperature applications. There were no imports of this product during the period of investigation, 1978-82.

(5) Grade 254 SMO stainless steel.--This product is a proprietory grade of stainless steel, which is produced in all product forms subject to this investigation. There is at present no potential U.S. production, as the patent is held by the Swedish producer who developed the grade. Although classified for tariff purposes as a stainless steel, its use is limited to very narrow applications in highly corrosive environments. Imports in 1982 represented less than .01 percent of U.S. consumption of the generic product categories and less than .01 percent of total imports.

(6) Stainless steel sheet 72 to 80 inches in width.--This product includes all grades of stainless steel sheet. It is the width dimension of the product which provides it with its unique characteristics. A Swedish firm is the only producer capable of manufacturing stainless steel sheet to this width, 17/ which has very limited uses in the production of such items as storage tanks in hostile environments, when the welding of narrower sheet would be impractical. Imports in 1982 represented less than 0.2 percent of U.S. consumption of the generic product category, and less than 2 percent of total imports.

17/ One U.S. producer is currently capable of producing limited amounts of stainless steel sheet up to 60 inches in width.

> The Commission is not advising the President that exemption of stainless steel plate in these dimensions would not have an adverse effect on the U.S. industry, given the more sizeable market for the wide plate product, and U.S. wide plate mill capacity and production of this product.

With regard to the additional exemption requests, 18/ sufficient U.S. capacity was found to be in place to satisfy market demand. To the extent such products are presently supplied by imports, it was because of lower import prices, or the ability of the importer to supply the product in smaller lot sizes (which itself is a function of price). The quantitative restrictions recommended by us may affect the volume and price impact of these imports sufficiently to make the domestic counterparts of these articles competitive again.

18/ See footnote 15 at 50.

VIEWS OF CHAIRMAN ALFRED ECKES REGARDING REMEDY

Executive Summary

I recommend that the President impose country-by-country quotas for a three-year period, exempting only razor-blade stainless steel, chipper knife tool steel, and band saw tool steel from the remedy. My formula for quotas is based on annual import levels during the 1979-1981 representative period. In my judgment, use of this reference period affords a remedy most likely to rectify the serious injury these industries have experienced from increased imports. My recommendation is consistent with the approach taken in previous investigations in which the Commission has recommended quotas.

Quotas

At the Commission's hearing on alternative remedies, the domestic industry and a majority of importers, accounting for the largest share of imports, all recommended that quantitative restrictions (quotas) be imposed to remedy the serious injury being experienced by each of these four industries. After listening to all parties and reviewing the record of this investigation carefully, I have concluded, as did my colleagues, that quotas are the most appropriate remedy. In my view quotas should be based on a market-share analysis reflecting the share imports held during 1979-1981, which I believe is the most recent period representative of import levels.

In effect, this proposed remedy would establish a ceiling on imports, based on a specific percentage of total apparent consumption, yet it would allow imports to participate in any future market growth. Should domestic demand decline, imports would decrease in a corresponding manner. However,

imports would not fall below a floor amount, which reflects the absolute average annual tonnage of imports during the most recent, representative reference period, 1979-1981, in accordance with section 203(d)(2). 1/

Length of Relief

As for the length of relief, it is my view that quotas should extend for three years, a sufficient period for the domestic industry to adjust to changing conditions of competition. This period of import relief should enable domestic producers to raise prices, and thus generate sufficient funds to improve productivity efforts. With increased productivity the domestic industry should be able to hold and perhaps even expand its share of the domestic market. Along with improved profit margins resulting from import relief, an upturn in demand for stainless and alloy tool steel also will assist the domestic industry in adjusting to new competitive conditions over the next three years. Without quotas, however, it is unlikely the U.S. industry will be in a position to recover lost market share in an economic recovery and achieve the level of profitability required to assure its future health.

The quotas should apply retroactively to January 1, 1983. This approach appears warranted because the serious injury experienced by domestic producers has occurred quite recently and has involved substantial loss of market share. A retroactive application of quotas ensures immediate and certain impact of the proposed remedy to help relieve present import-related injury.

1/ The adoption of these market share quotas arguably could be considered in conflict with sections 203(h) and 203(i) which seemingly contemplate that any changes in the level of relief during the remedy period should involve reductions in quota amounts, not increases. It is my view that in this investigation, market-share quotas are not inconsistent with the statutory provisions.

To administer the quotas effectively, I recommend that quota amounts be calculated quarterly, based on projected total U.S. consumption for each product in the next quarter. Based on information supplied by the parties to this investigation, which was confirmed by Commission staff, I understand that it is feasible to make such quarter-by-quarter forecasts. Such a flexible approach would allow import restrictions to be adjusted periodically, and thus tailored to shifting market conditions.

Exemptions

The U.S. Trade Representative has also requested the Commission's advice on exempting certain products from import relief. In my judgment there is a sound basis for exempting three products--razor blade stainless steel, chipper knife tool steel, and band saw tool steel. Razor blade steel was not included in the initial section 201 relief. The other two products were exempted from quotas by the President as the result of investigation No. TA-203-3. For these products there is either no domestic production or insufficient domestic production to meet the demands of consumers. Most importantly, the domestic industry has exhibited little, if any, interest in serving these market niches. I have adjusted my quota recommendations to reflect these exemptions.

I cannot concur with my colleagues' proposal to exempt "type 434 stainless steel strip." Based on the submissions of domestic consumers and producers, it appears there has been significant progress made in "qualifying" domestic sources in the near future. Given the sizeable volume of this article, it is important that domestic producers have an opportunity to re-enter in this market. Until recently this product had been historically supplied by a domestic producer which has now ceased operations. The proposed quota

restrictions for sheet and strip products will allow domestic consumers to import sufficient quantities of this product to avoid disruption of their operations while encouraging them to qualify new domestic suppliers.

During this investigation other parties requested exemptions. I have reviewed these requests carefully. Some involve situations where there is no present, or very limited, domestic production. Nevertheless, the use of country-by-country allocations of the recommended quota will ensure adequate opportunity for foreign producers to provide such low volume steel products to existing customers, while at the same time providing an opportunity for domestic producers to compete in these markets as well.

Country-by-Country Allocations

There are two possible ways to allocate quotas--either on a country-by-country basis, or on a country-by-country basis with a basket quota open to all other suppliers. As a result of the previous escape clause investigation, quotas were established on the latter basis. However, according to importers who testified during the present investigation, that approach worked ineffectively. A few major foreign producers with resources to warehouse inventories benefited, but other smaller suppliers suffered from uncertainty in the marketplace. Stainless steel products characteristically serve specific market niches, with imports from one or two countries often accounting for all imports of a particular type of steel supplied to one or few domestic consumers. Based on these characteristics, it would appear more specific, additional country-by-country allocations are preferable in this investigation. With this type system foreign producers serving small segments of the domestic market would gain more predictable access.

Recent Representative Period

My remedy differs significantly from my colleagues with regard to the appropriate recent representative period. I recommend appropriate quotas based on the years 1979-1981. They have selected a 10-year period, and have chosen to exclude from that calculation the years 1975 and 1982. The choice of a recent representative period is of fundamental importance to shaping the appropriate level of relief, because selection of this period operates to establish floor figures for import levels and the market-share percentages.

There are sound legal, economic and practical reasons for my selection of the 1979-1981 period. First, in an escape clause investigation the Commission is directed to focus on recent import trends and their relation to injury. Pursuant to section 201(d)(1) of the Trade Act of 1974, the focus of any remedy recommendation is to "find the amount of increase in, or imposition of, any duty or import restriction on such article which is necessary to prevent or remedy such injury . . . ." It follows from this provision that the effectiveness of any remedy recommendation must be assessed with regard to the nature of the injury found by the Commission. Specifically, the statute provides in section 201(b)(1) that the Commission shall "determine whether an article is being imported into the United States in such increased quantities as to be a substantial cause of serious injury . . . ." (emphasis added). In section 201(b)(2)(C), the statute further provides: "with respect to substantial cause, an increase in imports (either actual or relative to domestic production). . ." (emphasis added). It is apparent that Congress envisioned an injury determination which considered as part of that determination an analysis and consideration of recent import

trends. Nowhere in this language is there any suggestion that the Commission is directed to remedy historical import patterns, such as are reflected in a decade-long base period.

Interestingly, in their consideration of injury my colleagues appear to assess the relationship of recent import trends to injury experienced by domestic industries. Having made a conventional analysis of injury, it is surprising that in the absence of compelling reasons for a different analysis they have elected to ignore how recent import trends provide a reasonable basis for an effective injury recommendation.

In this respect, their remedy deviates from recent Commission practice. Since section 201 was amended in the Trade Act of 1974, the Commission in recommending quotas has based its proposal on the most recent years of non-injurious imports. These are the years immediately preceding the period in which the Commission has found increased imports to be a substantial cause of serious injury. Ordinarily Commissioners have chosen a recent two to five year representative period. Never have they favored a ten year base period, or elected to exclude one or more years from the period as unrepresentative, as my colleagues have done.

Reasons for 1979-to-1981 Period

In my judgment the years 1979 to 1981 provide both a reasonable measure for fair and equitable import levels, and adequate protection for domestic industries. During each of the years in this representative period the level of imports essentially responded to the free operation of supply and demand in the world market. It is true that quotas were in effect in 1979 and early 1980, but market forces prevailed. The quotas for stainless

steel flat products were substantially unfilled during these periods. Nor did the presence of quotas in 1979 and early 1980 distort the flow of imports later. There was no "flood" of imports after quotas were lifted in 1980.

Earlier periods, which were suggested, do not seem more representative. For instance, during the June 1976 to February 1980 period import relief, covering the same articles, was in effect, a result of the earlier section 201 investigation.

Even more remote periods have similar deficiencies. During most of the years 1969 to 1974 voluntary restraint agreements were in place, effectively distorting import levels.

There is another sound reason for not reaching backward in this investigation to include the pre-1975 period. Imports during those years have already been subject to review under our trade laws, and they were used in shaping the Commission's previous recommendation. The Commission offered a remedy for such injury in 1976. For the Commission now to consider imports occurring in the mid-1970's as somehow being indicative of import levels which should be non-injurious in the mid-1980's introduces an unwarranted unpredictability to our trade decisions. 1/

I am not persuaded that the shorter period I have chosen gives inadequate attention to cyclical industry conditions. Although there does appear to

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1/ What is the appropriate period for consideration in §201 investigations which overlap with periods already covered in earlier investigations has been a concern of Commissioners in other 201 investigations. Chairman Bill Alberger voiced concerns about reopening earlier Commission injury determinations in subsequent investigations on the same imported articles in the opinion on Fishing Rods and Parts Thereof, Inv. No. TA-201-45 (November, 1981), USITC Publication 1194.

be some pattern of upturns and downturns which has emerged from this investigation, it does not justify expanding the relevant period in my judgment. To do so ignores the increased import penetration of certain products under investigation in the most recent years and seeks to remedy ills already addressed in previous injury determinations. Also, the operation of voluntary restraint arrangements, domestic price controls, and import quotas at various times during my colleagues' "representative" period has produced other serious distortions, which preclude the emergence of a conclusive relationship between levels of imports and any cyclical character of U.S. consumption trends.

Other Remedy Flawed

A serious shortcoming in my colleagues' remedy involves alloy tool steel. In addressing the issue of injury to this industry, they emphasize that in 1982 there was a sharp decline in profitability and performance from a five-year high in 1979 (pp. 17-18). They indicate, as I do, how the ratio of imports to consumption for alloy tool steel steadily rose from 22 percent in 1978 to 48 percent in 1982 (p. 26). Yet, their remedy does not take into account the increase in foreign market share during the period of time most closely related to injury that we have found. Their remedy would relegate foreign suppliers of alloy tool steel to a 20 percent share of the U.S. market and a volume floor of 22,400 tons. Foreign suppliers have not held such a small share of the U.S. market since 1974, two years before the domestic industry successfully gained import relief from the Commission. As this illustration suggests, my colleagues' remedy seeks to repair injury already addressed in previous escape clause proceedings. It ignores

present conditions and unduly emphasizes the past, an approach that is totally unwarranted given the record of this investigation.

My colleagues' remedy for stainless steel plate similarly is flawed. They indicate in their analysis of injury, as I do, that serious injury to the stainless steel plate industry is "most evident in the financial experience of the domestic producers" (p. 16). From 1981 to 1982 operating profits turned sharply negative--and these losses were $12.5 million in 1982 (p. 16). Also, according to the injury determination (Commissioner Stern dissented on plate and did not find that increased imports were a substantial cause of serious injury), the ratio of imports to consumption increased from 9.2 percent in 1978 to a five year high of 12.3 percent in 1982 (p. 24). Curiously, the remedy that my colleagues have offered would concede foreign producers a 10 percent market share. The last time, prior to 1982, that import market share reached or exceeded 10 percent was in 1975 and 1976, which, incidentally, are the years in which the Commission found injury or threat of injury in the previous section 201 investigation. It is unsound to propose a market share for 1983 and subsequent years that was found injurious in the mid-1970s.

In short, I find no persuasive basis for abandoning in this remedy recommendation Commission precedents that are clearly established and well reasoned. Unlike my colleagues' plan, the period 1979-81 provides an unqualified measure of recent import trends which is consistent with statutory provisions. It envisages a non-injurious share of the market for our trading partners under present and future market conditions. To use a different period, including years remote from present market conditions, ignores the fundamental statutory relationship among increasing imports, injury, and a remedy which is to provide relief for that injury.

ADDITIONAL VIEWS OF COMMISSIONER PAULA STERN

My additional views discuss a number of areas of interest relevant to my determinations and recommendations, including:

-- weighing the causes of injury to the U.S. industry;
-- further observations on remedy;
-- comments on the independence of the Commission and its jurisdiction.

Because this investigation has posed some basic questions on interpretation of the statute, I am also taking this opportunity to offer my comments on the application of section 201 to cyclical industries. At the outset, it should be noted that the Commission's investigation of the role of imports in the problems of U.S. specialty steel producers demonstrates that section 201 import relief is available even when an American industry is suffering during the most serious recession since World War II.

A. Section 201 and Cyclical Industries

Need for another look. -- In Certain Motor Vehicles, 1/ the largest general import relief investigation the Commission has

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1/ See Certain Motor Vehicles and Certain Chassis and Bodies Therefor, Report to the President on Investigation TA-201-44 under Section 201 of the Trade Act of 1974, USITC Pub. 1110, December 1980. "Views of Commissioner Paula Stern" at 93-166. [Referred to as "Automobiles."]

ever conducted, I gave a rather exhaustive treatment of the statutory framework of section 201, including an analysis of its legislative history, Commission precedent, and the general problems of applying the statute. That analysis has stood the test of time and in the interests of brevity will not be repeated. The "Views" of the Commissioners are intended in the first instance for the President, to whom they are sent as explanations for our findings and recommendations. But their audience is obviously far larger -- the Congress which writes the law, the trade bar which argues the issues before the Commission, the interested private parties (importers and domestic businesses and their employees) who are directly affected by the outcomes, and last, but not least, the general public in whose ultimate interests the entire system should operate. Discussion of import relief since Automobiles has seemed to miscast the statute and subsequent Commission 201 decisions, particularly with respect to cyclical industries. A restatement of my 201 methodology may be helpful to distinguish my approach from others that have been put forward. By examining two previous significant 201 investigations, Automobiles and Heavyweight Motorcycles 2/ the full spectrum of positions will be evaluated.

2/ See Heavyweight Motorcycles, and Engines and Power Train Subassemblies Therefor, Inv. No. TA-201-47, USITC Pub. 1342, Feb. 1983. [Referred to as "Motorcycles."]

The extremes in dealing with cyclical industries. -- Some have oversimplified the choice facing the Commission when it analyzes cyclical industries during recessions. One extreme would treat all recession-related effects as a single cause to be weighed against imports; the other would eliminate recession as a possible alternate cause. The law is silent on a direct resolution to this issue, but it does intend that all industries, whether heavily cyclical or not, be on an equal footing when applying for section 201 relief. To count blindly all recession-related effects as one single cause weighed against imports could effectively thwart cyclical industries, like steel, from getting relief when they may need it most. On the other hand, eliminating from consideration all recession-related effects could give highly cyclical industries special advantages in obtaining relief during a downturn.

Fortunately, there is a path between the two extremes: considering only the unusual or abnormal effects on an industry in a downturn as causes of injury. This gives any kind of industry equal access to import relief, and I have consistently applied this approach.

Meaning of equal access for cyclical industries. -- The problem of cyclicality was first clearly posed in Automobiles where I first formulated this "equal access" framework:

> The historical cyclicality of the auto industry also raised a serious conceptual problem related to both injury and cause. Should a 'normal' business cycle decline in overall demand be factored out of the total injury picture? Should only injury beyond that expected be assessed in determining serious injury and causation? The questions cut both ways. By factoring out normal declines, it becomes more difficult for a cyclical industry to demonstrate serious injury; yet, it is less difficult to show substantial causation because an important non-import source of injury has been removed from the picture. The opposite effects occur if you factor in normal declines. 3/

In Automobiles, the advice of interested parties and my reading of Congressional intent led to the dictum that "cyclical industries should receive no special treatment." But that dictum does not tell us what treatment is "special" -- factoring in or factoring out the "normal" cyclical behavior of an industry.

3/ See Automobiles, "Views of Commissioner Paula Stern," at 127.

The solution to the question may be approached by considering the regular 4/ pattern of any cyclical industry Any mature industry in healthy condition must be able to replenish depleted capital and survive to the next period. In addition, a growth industry must be able to attract net new investment. Both of these activities are inherently "pro-cyclical." Investment does occur during downturns, but it is far more intense during upswings. Clearly, the exigencies of capacity limitations which stimulate the desire to replace and expand the capital of a firm are most palpable during upswings. Increased profits in boom times make it possible for firms to finance internally a greater portion of investment, thus diminishing less desirable exposure to debt financing or raising equity on a stock market depressed by bad business expectations. Compared to the relatively more stable branches of the economy,

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4/ I do not mean to imply that it is simple to establish what is "regular," "normal," or "expected." Each recession is individual in its timing, severity, and recovery. The National Bureau of Economic Research (a respected non-profit, independent economic research organization) has been cycle-watching for many decades without any definitive conclusions. National economies may move into recessions; individual industries and firms experience those recessions as downturns reflecting both national and particular circumstances. As one moves from the aggregate economic concept of recession to questions of a downturn in an individual industry, one moves into even more hazardous ground. The law of large numbers no longer provides much assistance and the peculiar circumstances of any one industry's market and production conditions which may be totally unrelated to national conditions -- can swamp recession related effects. Furthermore, the performance of any particular industry can lead, lag, or move in unison with the national aggregates such as Gross National Product, etc.

heavily cyclical industries must generate heavier profits during the upswings to make it through the downturns. Injury (from imports or other sources) can occur during either part of the cycle if those profits are squeezed or losses magnified. But it is obvious that heavily cyclical industries (e.g., steel, automobiles, housing) can more easily demonstrate injury during downturns. 5/ It is also clear that no remedial action is necessary for industries experiencing normal or expected downturns because the cycle itself will replace such temporarily difficult times of below-average profits with the above-average profits of the upswings.

The conceptual foundation of the process of adjusting for "normal" cycles can be made clear by the following approximation. Cyclical industries are moving targets and hence it is more difficult to focus on them. Amidst the peaks and troughs of their cycles, we can draw an imaginary trend line which smoothes out the cycles. This puts cyclical industries on the same basis as those not so exposed to the effects of recessions and booms. The criteria of section 201 may then be applied to any departure from this imaginary trend line to answer how large the departure

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5/ In Automobiles, I noted that the problems of the industry in part manifested themselves over the twenty-year period 1960-1980 in which each successive peak in aggregate profit margins was lower than the previous peak. (Automobiles at 142.) It is extremely rare for the Commission to have sufficient data to make an observation such as this about the peak performance of a cyclical industry.

is (the question of serious injury) and what factors are responsible (the question of substantial cause). Moving to either of the extremes I set forth at the outset -- fully counting recession-induced downturns as a cause other than imports or fully eliminating such downturns -- would subject cyclical industries either to special advantage or disadvantage in obtaining import relief. In Automobiles, my analysis of section 201 and its legislative history led me to the conclusion that "it is unlikely that the Congress intended to make relief more difficult to obtain for industries beset by repetitive cyclical downturns." 6/ As will be shown below, this principle motivated me to adopt a very different methodology in Automobiles from the one followed by two colleagues (though I joined with them to form the Commission majority). Given my reading of Motorcycles, I now find that the other side of the coin to be of equal importance: The law shows no indication whatsoever that Congress intended to make it easier for cyclical industries to obtain relief simply because they are cyclical.

6/ Automobiles at 129.

Where to adjust for cyclicality. -- Having concluded that proper application of section 201 requires adjustments for cyclical industries, there remains the problem of where these adjustments should be considered -- during the examination of serious injury, in the analysis of substantial cause, or with some combination of the two. In Automobiles, I made no attempt to adjust the injury indicia for expected downturns in the industry. 7/ Realizing that any such adjustment was inherently subjective, I chose to leave the relatively objective injury data alone and make the adjustments when conducting the inevitably more qualitative examination of causation. 8/

7/ Automobiles at 129-130.

8/ Congress has recognized that the relative weighing of alternate causes of injury is unquestionably subjective. See S. Rept. No. 93-1298, 93d Cong., 2d Sess. (1974) at 120. Professor J. Jackson in World Trade and the Law of the GATT (Section 23.3, p. 561, 1969) stated that "serious" investigation of the term serious injury "has occurred only once in practice" -- the Hatters' Fur case (1950). The GATT Working Party appointed to investigate the dispute found that even serious injury, no less its causation, "is essentially a matter of economic and social judgment involving a considerable subjective element." (Report on Withdrawal by the United States of a Tariff Concession under Article XIX of the GATT, Geneva, 1951, at 22.) While I agree with the GATT Working Party on this point, causal considerations are even more subjective in nature than injury considerations.

The treatment of cyclicality could be confined to causal considerations in Automobiles in part because the question of serious injury was so clearly established. It is a rather sterile semantic problem to debate whether a cyclical industry in a normal downturn should be denied relief because it is not injured or because the cyclical injury reflected in its weakened performance is not related to imports. Thus, my convention of taking into account such considerations when examining causation rather than injury is a matter of presentation, not substance.

Underlying principles. -- The approach I have chosen in examining cyclical industries rests on three factors:

First, in the total absence of any indication otherwise, the Congressional intent is that all industries -- heavily cyclical or stable -- have equal access to protection under the import relief statutes.

Second, when a statute is subject to a number of different interpretations, the Commission should choose the interpretation which will best effectuate the intent of Congress when the statute was passed. As one commentator has stated:

> When a question arises as to whether or how a statute should apply with reference to particular circumstances, as is the case

> when any other kind of question is to be decided, a decision can be reached only by applying some kind of a criterion, whether it be rational or otherwise. For the interpretation of statutes, 'intent of the legislature' is the criterion, or test, that is most often recited. An almost overwhelming majority of judicial opinions on statutory issues are written in the idiom of legislative intent. The reason for this doubtless lies in an assumption that an obligation to construe statutes in such a way as to carry out the will, real or attributed, of the lawmaking branch of the government is mandated by principles of separation of powers. 9/

Although the Commission is not an Article 3 court, it is a creature of the Congress. The Commission cannot make the law, but must interpret it so as to best effectuate Congressional intent. As the Supreme Court has stated: "The intent of the law-makers is the law." 10/

Third, the difficult process of factoring out the "usual" aspects of a recessionary downturn is the approach that best upholds Congressional intent and gives economic meaning to the 201 import relief process. The terms "abnormal," "peculiar,"

9/ C. Sands, Sutherland Statutory Interpretation, (§ 45.05 (1973). See also SEC v. Joiner Corp., 320 U.S. 344, 355 (1943).
10/ See Jones v. Guaranty and Indemnity Co., 101 U.S. 622, 626 (1879).

"unexpected," or "unusual" may be subjective but they reflect the only practical approach to sorting out what factors may be responsible for lowering a cyclical industry's performance below the trend line I discussed above.

Role of qualitative analysis. -- Congress was well aware that 201 analysis was inevitably subject to individual judgment and not a direct function of quantitative calculations. The Senate Finance Committee explicitly recognized this situation when it stated:

> The Committee recognized that 'weighing' causes in a dynamic economy is not always possible. It is not intended that a mathematical test be applied by the Commission. The Commissioners will have to assure themselves that imports represent a substantial cause or threat of injury, and not just one of a multitude of equal causes or threats of injury. It is not intended that the escape clause criteria go from one extreme of excessive rigidity to complete laxity. An industry must be seriously injured or threatened by an absolute increase in imports, and the imports must be deemed to be a substantial cause of the injury before an affirmative determination should be made. 11/

11/ S. Rept. No. 93-1298, 93d Cong., 2d Sess. 1974) at 120-21.

Analytical tools such as shift-share analysis and econometric modeling can provide insights, but they rarely can match one-for-one the considerations Congress, as well as sound legal and economic reasoning, requires of the Commission. To limit our choice to either of the two extremes simply because the numbers are more straightforward would smack of sophism. We should not limit our analysis simply because economic theory has not yet been able to fully quantify certain considerations. That would be bad policy indeed. I believe both quantitative and qualitative elements are indispensable to carry out Congressional intent.

Recent Commission 201 investigations. -- A quick analysis of some of the positions elaborated in two significant 201 investigations will help to clarify further these issues.

In Automobiles (1980), my two colleagues in the majority apparently chose to count fully a recession-related decline in demand as an alternate cause of injury. In reaching his negative finding, Chairman Alberger stated,

> . . . I have found the decline in demand for new automobiles and light trucks owing to the general recessionary conditions in the United States economy to be a far greater cause of the domestic industries' plight than the increase in imports. 12/ (Emphasis added.)

12/ See Automobiles, "Views of Chairman Bill Alberger" at 21.

Consistent with this choice, he then relied on shift-share analysis to weigh the two alternative causes: recession vs. imports. Vice-Chairman Calhoun appears on this matter to have shared Chairman Alberger's views. After noting that "decline in demand, in this investigation, is the result of the recessionary pressures on the economy . . .", he concluded, ". . .the decline in demand was and is a more important cause of serious injury than increased imports." 13/ Vice-Chairman Calhoun, with reservations, also applied a shift-share analysis. 14/ Though I too found in the negative, my methodology was clearly distinguishable. By analyzing the elements of the decline in demand that the industry was experiencing, I separated out normal cyclical fluctuations from the departure from the trend in the industry's performance. Shift-share analysis was of little assistance in moving beyond a simple imports versus recession framework. I found at least two causes (and perhaps a third) to be more important than imports as a substantial cause of serious injury. The cause I found most important demonstrates the salient methodological point separating me from Commissioners Alberger and Calhoun:

13/ See Automobiles, "View of Vice-Chairman Michael J. Calhoun," at 83 and 86.

14/ Ibid. at 85-86 and 88-89.

> A general decline in demand due to rapidly increasing costs of car ownership and operation (added to normal -- if not precisely predictable -- recessionary effects on consumer income and confidence.) 15/

In Motorcycles (1983), I noted that this problem did not arise in the same way because:

> [T]he Commission has no information establishing any expected pattern of cyclicality in this industry. However, because I am looking at the peculiar aspects of these years, the analytic problems of cyclical industries discussed in the auto case do not arise. 16/

The decline in demand which I cited as a cause more important than imports was not related to any regular cyclical pattern. Rather, it stemmed from the "peculiar problems facing the domestic industry in 1981 and 1982," particularly the "unusually high levels of unemployment" among blue collar workers (who were the predominant purchasers of motorcycles) and changes in domestic competition.

Chairman Eckes -- in contrast to Alberger and Calhoun in Automobiles -- apparently chose to stand at the other end of the spectrum by totally factoring out recession-related effects, both normal and unusual, in reaching his affirmative findings:

15/ See Automobiles, "Views of Commissioner Paula Stern," at 134.

16/ See Motorcycles, "Views of Commissioner Paula Stern," footnote 35 at 66.

> In reaching this conclusion I have considered the significance of the present recession in my analysis. Without a doubt the unusual length and severity of the present recession has created unique problems for the domestic motorcycle industry. Without a doubt the rise in joblessness, particularly among blue-collar workers, who constitute the prime market for heavyweight motorcycles, has had a severe impact on the domestic industry. Nonetheless, if the Commission were to analyze the causation question in this way, it would be impossible in many cases for a cyclical industry experiencing serious injury to obtain relief under section 201 during a recession. In my opinion Congress could not have intended for the Commission to interpret the law this way. 16a/

I trust this discussion of the spectrum of Commission practice demonstrates that the approach I suggest is a middle course. However difficult, it avoids even more serious problems.

B. Causes of Injury to U.S. Specialty Steel Producers

I am for a number of reasons offering additional analysis of the causes of the serious injury to U.S. specialty steel producers. The exercise of weighing among the causes to determine whether imports are as important as any other cause is much more reliably done and understood when the non-import problems confronting the industry are explicitly described and

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16a/ Motorcycles, "Views of Chairman Alfred Eckes" at 15.

their relative importance is assessed. Additionally, this discussion will allow readers to better follow the specific manner in which the statute should be applied to a cyclical industry. Finally, a look beyond the micro data on each specialty steel product group given in the "Views of the Commission" allows us to see the forest from the trees by concentrating on the most important phenomena.

Summary. -- I have found that imports, benefitting from an array of factors, including a significantly over-valued dollar, are the most important cause of the serious injury experienced by all the U.S. specialty steel industries except stainless steel plate. An unusual decline in demand due to the domestic effects of the extraordinarily high interest rates is the second most important cause of injury except in plate, where it is a more important cause of injury than imports. These skyhigh interest rates have brought on, deepened, and lengthened the current recession. They constitute an unusual factor (beyond any normal cyclical decline in demand) in the current downturn in specialty steel. Except in plate, a third cause of injury, the decline in U.S. exports, is clearly less important than both imports and the unusual decline in demand. With respect to plate, declining exports vied with the unusual decline in demand as a substantial cause -- but both factors were more important than imports as causes of injury.

Imports and exchange rates. -- I find that the overvaluation of the dollar in 1982 was a key factor affecting increased import volumes . 17/ The stronger dollar contributed to lower dollar prices of imports, encouraging purchases of imported specialty steel at the expense of U.S.-produced steel. 18/ 19/ An analysis of specialty steel imports and exchange rate trends from 1978 to 1982 lends strong support to the importance of the effect of exchange rate changes on specialty steel imports.

17/ I recognize that in addition to exchange rate changes there are other factors affecting both import and export trends, including changes in U.S. or foreign specialty steel demand, structural barriers to trade, or market disrupting forces such as the 1980 steel strike in the United Kingdom. However, the strong relationship between changes in these trade flows and changes in the U.S. exchange rate illustrates the influence of exchange rate changes on foreign trade in the specialty steel industry.

18/ The U.S. specialty steel industry argued that because a portion of foreign specialty steel producers' costs are denominated in dollars, an appreciating dollar would raise foreign costs of production, cancelling out any competitive advantage the appreciation would give foreign producers in the U S. market. This cost factor may have offset some of the competitive advantage gained by foreign producers in the U.S. market as the result of the strong dollar. However, only if 100 percent of foreign producers' costs were denominated in dollars, would the appreciating dollar have had no effect on foreign producers' competitiveness. Because roughly a third of costs are accounted for by labor alone, it is likely that a very large share of foreign producers' costs are denominated in local, non-dollar currencies.

19/ An earlier report by the Commission's Office of Economics studied the effects of exchange rate changes on U.S. competitiveness for a number of different products. It concluded that for homogeneous products--specialty steel can be considered to be relatively homogeneous -- "price changes caused by exchange rate changes will often appear within a short time, often within a few days." See Floating Exchange Rates and U.S. Competitiveness, USITC Publication 1332, December 1982.

From 1978 to 1980 the dollar depreciated against the currencies of most of our major trading partners. 20/ Over this same period, aggregate imports of specialty steel decreased by 33,000 tons or by 20 percent. From 1980 to 1982 the dollar steadily and significantly appreciated. 21/ This appreciation was concurrent with a 73,000 ton or 56 percent increase in specialty steel import volume. As a percentage of U.S. specialty steel production, imports increased from 13.2 percent in 1980 to 26.5 percent in 1982. 22/

Exports and exchange rates. -- Exchange rate changes also appeared to play a key role in export trends and contributed to the decline in U.S. producers' shipments. As the dollar depreciated from 1978 to 1980 total exports of stainless steel and alloy tool steel increased from 51,000 tons in 1978 to 112,000 tons in 1980, an annual average increase of about 50 percent. As the dollar appreciated from 1980 to 1982, exports

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20/ Report at A-135-136.

21/ As measured by the U.S. effective exchange rate, the dollar appreciated by 31 percent from the first quarter of 1980 to the fourth quarter of 1982. Against the currencies of some individual supplying countries, appreciation over the period was even more dramatic: 74 percent against the Swedish krona, 70 percent against the French franc, and 41 percent against the German mark.

22/ On a quarterly basis, correlations between imports and exchange rates were positive for all five product lines, and statistically significant for total imports and for imports of three of the five product groups (See Report at A-135).

decreased to 65,000 tons in 1981 and to 39,000 tons in 1982, an annual average decrease of about 40 percent. As a percentage of U.S. production, U.S. producers' export shipments declined from 11.3 percent in 1980 to 5.1 percent in 1982.

This aggregate export trend was essentially followed for three of the individual product lines: stainless steel sheet and strip, stainless steel plate, and stainless steel bar. Exports of stainless steel wire rod were a small percentage of U.S. producers' shipments and showed no real trend. Exports of alloy tool steel never exceeded the 1978 level of 5,000 tons, and generally declined from 1978 to 1982. 23/

Unexpected decline in demand. -- I find that the effects of unusually high interest rates on demand have also been an important cause of serious injury to the domestic specialty steel industry. These high interest rates are the result both of the U.S. government's monetary policy to combat inflation and of the economy's adjustment to the high inflation of the mid- and late-1970's. This monetary policy has -- in addition

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23/ Although annual exports of alloy tool steel did not appear to follow exchange rate changes, a significant negative correlation existed between quarterly exports of this product and quarterly exchange rates (Report at A-137).

to contributing to a reduction of inflation -- contributed to nominal and real interest rates which have remained at extraordinarily high levels with grotesque effects. The 1982 recession is unlike any previous recession as a direct result of this situation.

In 1975 -- the most severe post-war recession prior to 1982 -- real interest rates were actually negative because inflation exceeded the cost of borrowing money. In 1982, however, not only were real interest rates positive, but they were higher than in any recent period. Inflation declined to three percent from the end of 1981 to the end of 1982 while the nominal prime rate remained at about 15 percent. 24/

The high interest rates, both on a nominal and a real basis, have caused several identifiable effects in the market for specialty steel. The first was a tightening of inventory policy by users of specialty steel. As the cost of keeping inventory of steel on hand increased faster than the value of the material, purchasers began to liquidate their inventories faster than historical patterns would indicate is normal. U.S. producers stated that this liquidation caused a decline in shipments considerbly more severe than they had expected. 25/

24/ Report at A-41-42.
25/ See Hearing Transcript (Injury), February 9, 1983 at 160-164.

Second, the rapid reversal of inflation and the perseverence of high nominal interest rates dampened consumer spending for articles such as appliances and automobiles -- both significant users of stainless steel sheet and strip -- which are generally financed at current interest rates by the purchaser. At the same time, capital expenditures by businesses declined more than would normally be the case had interest rates been permitted to find more reasonable levels; these affected the producers of capital goods who are the prime users of other specialty steel products.

Although the unusual decline in demand (due to extraordinarily high interest rates) has been an important cause of injury, it has not been as important a cause as imports in three of the four industries producing these products. For stainless steel plate, however, the unusual decline in demand exceeded imports as a cause of injury.

Other causes. 26/ -- There are other possible causes of injury that I have considered in this investigation. Some of these causes, while playing significant roles in the plight of large cyclical industries such as carbon steel and automobiles, have been far less important in the problems of specialty steel producers.

26/ The role of increasing labor costs in the industry's problems has not been studied adequately. Between 1979 and 1982, total compensation per hour grew by 51 percent, while productivity grew five percent. Unit labor costs increased as a result by 31 percent. (Data for all stainless steel based on Table 24 of Report.) However, it is not possible to meaningfully discuss wage and productivity trends over just the declining portion of one business cycle. The 51 percent change in total hourly compensation compares to only a 33 percent increase in the Consumer Price Index. Labor costs account for between 25 percent of costs of goods sold for sheet and strip and 37 percent for wire rod. The aggregate average for specialty steel is about 26 percent. Wages may very well constitute a problem worthy of more serious attention than they have thus far attracted. The available information does not suggest that they could have been as important a problem as imports in any case. (Report, Table 45, at A-136).

Interest expenses of the specialty steel producers increased significantly over the five years for which we have collected data. As the cost of borrowing money for normal operations and for those commitments which could not be put off increased, the balance sheets of the industry showed rising expenditures. In 1978, the category "other income or expense" (which includes interest payments) showed that income outweighed expenditures; but in 1979 this reversed and in 1980 became a burden on profits of $15 million. In 1981 and 1982, this burden reached a dramatic level of $23 and $25 million, respectively, for the entire specialty steel industry. Interest rates were the driving force behind these changes. While an interesting phenomenon, it has had small overall significance in explaining the fate of U.S. producers whose net profits declined by over $400 million between 1979 and 1982 while net interest payments increased by $10 million. 27/

27/ Report at A-116.

Transportation costs can be a significant factor in the final cost of a product in the United States. However, this factor is considerably more important in the case of lower-valued products such as carbon steel than in the case of specialty steel. Carbon steel products sell for a few hundred dollars per ton, whereas prices of specialty steel products generally range from $1,600 per ton up to $8,000 per ton. 28/ This factor in itself reduces the importance of transportation costs in this case because freight costs are based on weight and volume, not value. In addition, locational factors also serve to diminish transportation costs for specialty steel. Most specialty steel products are both produced and consumed in the Northeast and the North Central regions of the United States. 29/ Carbon steel also is primarily produced in this

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28/ Id. at A-13.
29/ Report at A-14-16.

industrial belt, but its customers are much more widely distributed. Data collected from U.S. producers show that inland transportation costs as a percentage of total shipment value ranges from one to three percent for specialty steel, while ranging from six to 35 percent for carbon steel products. 30/ 31/ Therefore, I have found that changes in transportation costs are not an important cause of injury to the specialty steel industries.

30/ Id. at A-13.

31/ The effects of the changing location of consumption of carbon steel have become particularly important as user industries have developed in areas with easy access to the Gulf and Pacific Coasts and far from producing facilities. Access by water makes these areas natural markets for foreign producers of any product which can be shipped by sea, and a recent study shows that offshore transportation costs, as a percentage of total shipment value, have declined in recent years while inland freight costs have increased. See Transportation Costs of U.S. Imports, USITC Pub. 1375, April 1983. No such pehnomenon is present in specialty steel because of the continued concentration of specialty steel customers in the Northeast industrial belt, where the producers are also concentrated.

Technological change can also cause injury to U.S. producers if U.S. producers fail to adopt useful technology or the user-industries switch to new alternatives. I do not find either to be the case in this investigation. The producers are modern, efficient, and at the forefront of production technology. There are no known technological advances in the production of specialty steel overseas that are not already in use in the United States. I have no reason to conclude that any failure by the U.S. firms to keep up with production technology has hampered its competitiveness.

Furthermore, in contrast to the automobile industry where consumers demanded rapid product changes requiring technology not readily applicable in the United States, no such end-user switch has adversely affected the specialty steel industry. Stainless steel products and alloy tool steel products are generally used to take advantage of the inherent characteristics of the metals; few, if any, other products possess these characteristics. 32/ Some stainless steel sheet

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32/ Report at A-43-45.

and strip is used because of its aesthetic value, primarily for use on consumer products; there may have been some switching in recent years to cheaper plastics or other products that have similar appearances, but this apparently remains a small factor. 33/ Most substitution of other products for specialty steel has been long-term, 34/ while the injury is clearly caused by recent factors. Additionally, the trend in consumption of stainless steel has been upward, reflecting technological changes which have increased the demand for specialty steel. 35/ Therefore, I conclude that technological change in user-industries and failure by producers to apply useful new technology are not important causes of injury to domestic specialty steel producers.

33/ Id.
34/ Id. at A-43.
35/ The use of stainless steel wire in catalytic converters for automobiles is a ready example of this phenomenon.

Interdependence of Causes. -- As I noted in Automobiles, independent modeling of recessionary influences of large industries may be impossible. In a mathematical sense, there are very few truly independent variables to consider. And because many of the factors important to an understanding of this industry operate simultaneously, separation of their independent effects must necessarily be a qualitative rather than an econometric effort. 36/

The causes I have discussed in this investigation demonstrate all these considerations. For instance, the grotesque U.S. interest rates of the last two years are perhaps the single largest factor in the recent story of the industry's performance. But it is not appropriate to treat interest rates as a unitary cause. 37/ Rather their international effect on exchange rates (along with other factors) explains (along with other factors) two separate causes of injury: increasing

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36/ See Automobiles at 130-31.
37/ The law specifically requires that increased imports be treated as a unitary cause. Therefore, the law requires at a minimum that the effects of interest rates on imports be considered separately from non-import effects.

imports and declining U.S. exports. The domestic effects of interest rates through an extraordinary impact on inventory policies and demand by user-industries explain yet another cause of injury: a decline in demand above any expected recessionary fluctuation. Interest rates also directly account in part for the worsened financial picture of domestic producers. In short, high interest rates have spun a web around this industry. But the effects of this single factor are best analyzed by separating them from among a number of causes each with independent standing in the weighing process of this 201.

C. Additional Comments on Remedy

Remedy for stainless steel plate. -- I am recommending a remedy for an industry for which I have found imports to be a substantial cause of serious injury. I am taking this somewhat unusual step because Congress has expressed its desire that the Commission whenever possible achieve a consensus on relief in 201 investigations and because the circumstances of this case permit me to do so.

The Senate Finance Committee has noted:

> The Committee believes strongly that Commission determinations under this and other statutes ought to be clear, well documented, and, as nearly as possible, decisive. The Committee is disturbed by the frequency of tie votes on cases before the Commission particularly when not all Commissioners have voted. In all cases the Commission should seek to reach a majority vote on the matter before it. The effect of a "no decision" tie vote in an escape clause case is to give the President complete discretion without much guidance about the case. 38/

Although imports were not shown to be the most important cause of injury to the plate industry, they have played an important role by expanding an already significant share of the weakened U.S. plate market in 1982. My relief recommendation of market share quotas for three years is most stringent for

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38/ S. Rept. 93-1298, Trade Reform Act of 1974, at 121.

products where imports have had a relatively greater impact; it is least stringent where imports have played the smallest role, specifically plate.

Alternative Remedies. -- The following table is useful in judging the stringency of the relief recommended under the two remedies emanating from the Commission. The entries give the ratio of the recommended market share quota to the actual share of imports held in 1982. Lower ratios imply relatively more stringent relief.

	Commission Remedy	Minority Remedy
Plate	.80	.39
Sheet & Strip	.62	.55
Bar	.57	.66
Wire Rod	.84	.76
Alloy Tool Steel	.41	.56
TOTAL	.62	.62

My analysis of causation has demonstrated that increasing imports have had the strongest impact on alloy tool steel and bar; a smaller impact on sheet and strip; and their weakest relative impact on wire rod and plate. The Commission remedy, based on the period 1972-1982 (excluding 1975 and 1982), provides the weakest relief in plate and wire rod, stronger relief in sheet and strip, yet stronger relief to bar, and the most stringent relief to alloy tool steel. Thus, the majority remedy is tuned to the impact of increasing imports on each product.

In contrast, the minority remedy recommends the most stringent relief for plate, the industry least affected by increasing imports. Alloy tool steel, suffering the most severe impact from dramatically increasing imports, would receive far less stringent relief than bar and wire rod and barely more than sheet and strip.

Interestingly enough, the overall level of relief is identical for both remedies. The poor matching of relief to the relative impact of increasing imports in the minority remedy results from the choice of base period. The variations in import penetrations have been so erratic over the last decade that choosing the short 1979-1981 period subjects the remedy to the vagaries of just those few years. As a general principle, the stringency of import relief should be matched to the relative impact of the imports. Only the majority remedy fits this bill.

Exemptions. -- Unless there are significant administrative or other practical problems 39/ the market share quotas should not be applied to the products for which Commissioner Haggart and I have found there would be no adverse affect, if exempted. Each of these products has been subjected to and met the rigorous standards used to examine the three major products

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39/ The Commission has received no such information.

unanimously recommended for exemption. Each of these products can be exempted for specific end uses that would discourage possible circumvention of the overall market share quota remedy. Virtually all import volumes are so relatively small (except 72 inches to 80 inches wide stainless steel sheet) that adjustment to their exclusion of the base period on which the market share quotas are calculated would not alter even the first decimal place. But their importance can be great to certain exporters and exporting countries. Most importantly, these items are often inputs for high technology industries in the United States. Subjecting these products to the generic market share quotas would provide little or no benefit to the U.S. specialty steel producers while unnecessarily interfering in the commercial activities of the U.S. industries which use these items.

Three years of relief. -- The single most impressive fact about U.S. and foreign specialty steel producers alike is the absolutely dynamic character of both the production and market sides of the business. The last decade has seen development and application of substantial technological improvements, emergence of new suppliers, and decline of others. There have been wild swings in worldwide production, in employment and

and profitability, in prices and capacity utilization, and in interest and exchange rates. There have been many kinds of non-market forces at work: voluntary restraints (possibly even unannounced in some cases); price controls, trigger prices, and surge mechanisms; unfair and escape clause investigations with relief and requests for prolongation of relief, and strikes that have temporarily affected competition. "Dynamic" as an adjective seems an understatement. There is no reason to believe the next five years will be much different in this respect. Extending relief beyond three years at this time would require a crystal ball in addition to the standard projections. The recommended remedy will not change the fundamental culprits in this industry's problems -- sky-high interest rates and an overvalued dollar. All it can do is give the innovative U.S. producers some breathing space. More enlightened public policy -- and in its absence, old fashioned luck -- will have to take care of the rest.

D. Unfair trade investigations and expedition

Unfair trade cases. -- Some products included in this 201 investigation have been or are the subject of unfair trade investigations under the countervailing duty and antidumping provisions of Title VII of the Tariff Act of 1930, and under section 301. 40/ Some parties in both the 201 and Title VII

40/ In 1982 the Commission conducted a number of antidumping and countervailing duty investigations involving specialty steel products. In the countervailing duty area, four cases were instituted on specialty steel. The first was Hot-rolled Stainless Steel Bar, Cold-formed Stainless Steel Bar and Stainless Steel Wire Rod from Spain, Inv. Nos. 701-TA-176-178. Final determinations in these investigations were made in December 1982. The Commission made a negative determination on hot-rolled stainless steel bar and cold-formed stainless steel bar (Chairman Eckes dissenting) and an affirmative determination on stainless steel wire rod.

Two countervailing duty cases have also been filed against Brazil -- Hot-rolled Stainless Steel Bar, Cold-formed Stainless Steel Bar, and Stainless Steel Wire Rod from Brazil, Inv. Nos. 701-TA-179-181, and Certain Tool Steel from Brazil, Inv. No. 701-TA-187. Both cases have been suspended.

The section 301 petition filed with the USTR alleged that the European Community, Belgium, France, Italy, the United Kingdom, Austria, and Sweden had subsidized the production of stainless steel and alloy tool steel in a manner inconsistent with their obligations under the Subsidies Code.

Concurrently, countervailing and antidumping petitions were filed on Stainless Steel Sheet and Strip and Stainless Steel Plate from the United Kingdom, Inv. No. 701-TA-195-196; Stainless Steel Sheet and Strip from West Germany, Inv. No. 731-TA-92; Stainless Steel Sheet and Strip from France, Inv. No. 731-TA-95; and Certain Tool Steel from West Germany, Inv. No. 731-TA-100. Only preliminary injury determinations have been made in these investigations. The Commission is scheduled to make final determinations in these investigations in June and July.

investigations have raised questions regarding the relation between them.

The statute and the legislative history both strongly reflect Congressional intent that 201 not be relied on unless necessary. Section 701(b)(6) specifically provides that,

> Whenever in the course of its investigation the Commission has reason to believe that imports are attributable in part to circumstances under the purview . . . [of the predecessors to the current Title VII provisions], the Commission shall promptly notify the appropriate agency so that such action may be taken as is otherwise authorized by such provisions of law.

The Senate Finance Committee Report observes that:

> This provision is designed to assure that the United States will not needlessly invoke the escape-clause (article XIX of the GATT) and will not become involved in granting compensatory concessions or inviting retaliation in situations where the appropriate remedy may be action under one or more U.S. laws against unfair competition for which no compensation or retaliation is in order. 41/

Because the Title VII cases are already underway, the issue as to whether the Commission should notify Commerce or the USTR about alleged unfair acts is moot. But there clearly are potential problems, even if at this early stage the specifics are difficult to foresee.

41/ S. Rept. No. 93-1298, at 123.

Title VII relief is presently in effect for only a very small percentage of the products covered by this 201 investigation. The potential effects of such relief on the deliberations here are so small as to have no relevance. The Commission has unanimously recommended country-by-country allocations of the global quotas. But should Title VII relief be subsequently extended to a significant portion of the imports examined in this 201, the effective overall level of 201 relief could be raised above recommended levels if some country allocations go unfilled as a result of Title VII relief against those countries. Adjustment at the Presidential level to lower the overall level of 201 relief may be necessary in light of any final Title VII determinations which the Commission may make. 42/

Presidential memorandum. -- A copy of the Presidential memorandum of November 16, 1982 43/ which related the determination by the President under section 301 of the Trade Act of 1974 and directed the United States Trade Representative (USTR) to initiate the present 201, is reproduced in Appendix B of the Commission's Report. Within the President's "Statement of Reasons," a number of

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42/ Section 203(h)(4) sets forth the procedure by which the President may reduce relief that has been accorded.
43/ 47 F.R. 51717.

conclusions are reached regarding the level of injury of the U.S. industry, its causes, and the necessary solutions. For the purposes of this investigation, I wish to make clear that these judgments have played no role in my deliberations, findings, or recommendations. To have allowed otherwise would have undermined the independent, quasi-judicial nature of the Commission as provided for and repeatedly affirmed by the Congress.

Expedition. -- The USTR requested the Commission to conduct an "expedited investigation." 44/ The statute provides for no formal expedition procedure. But it does require in section 201(c)(2) that the Commission report its determination "at the earliest practicable time, but not later than 6 months after the date on which the petition is filed (or the date on which the request or resolution is received or the motion adopted, as the case may be)." Thus, the Commission, even without a request for "expedition," must do its work as fast as practically possible. An examination of Commission practice shows that investigations have been completed in less than six months when data was available from a recent prior investigation or where the domestic industry contained only a few producers (facilitating the information-gathering process).

44/ See footnote (3) to "Views of the Commission," supra.

I wish to assure all those interested that the Commission always seeks to comply with the statutory admonition, "at the earliest practicable time." The six-month period is in my judgment the shortest possible period in which the Commission can generally conduct a section 201 investigation without sacrificing depth or quality. As a reading of the views on remedy should demonstrate a significant portion of this time is devoted to complex remedy issues. The present six-month requirement has been in the law since 1958. The time period for completing such escape clause investigations was originally one year in the Trade Agreements Extension Act of 1951. 45/ It was reduced to nine months in the Trade Agreements Extension Act of 1953 46/ and six months in the Trade Agreements Extension Act of 1958. 47/ In that context, every 201 investigation seems expedited. The statute itself leaves no room for 201's to languish.

45/ 65 Stat. 74

46/ 67 Stat. 472.

47/ 72 Stat. 676.

INFORMATION OBTAINED IN THE INVESTIGATION

Introduction

On December 9, 1982, the United States International Trade Commission instituted investigation No. TA-201-48, under section 201(b)(1) of the Trade Act of 1974, to determine whether bars; wire rods; and plates, sheets, and strips, not cut, not pressed, and not stamped to rectangular shape; all the foregoing of stainless steel or certain alloy tool steel; and round wire of high-speed tool steel, provided for in items 606.90, 606.93, 606.94, 606.95, 607.26, 607.28, 607.34, 607.43, 607.46, 607.54, 607.72, 607.76, 607.88, 607.90, 608.26, 608.29, 608.34, 608.43, 608.49, 608.57, 608.64, and 609.45 of the Tariff Schedules of the United States (TSUS), are being imported into the United States in such increased quantities as to be a substantial cause of serious injury, or threat thereof, to the domestic industry producing articles like or directly competitive with the imported articles.

The investigation was instituted following the receipt of a letter on November 23, 1982, from the United States Trade Representative (USTR) requesting an expedited investigation under section 201 concerning imports of certain stainless steel and alloy tool steel products. 1/ The USTR's request was in accordance with a determination of the President on November 17, 1982 (47 F.R. 51717), under section 301(a)(2)(A) of the Trade Act of 1974 (19 U.S.C. 2411(a)(2)(A)). 2/ The President's action followed the completion of investigations under section 301 of the act initiated by the USTR on February 26, 1982 (47 F.R. 10107), and on August 9, 1982 (47 F.R. 36387). These investigations were instituted on the basis of petitions, filed by the Tool and Stainless Steel Industry Committee and the United Steelworkers of America, alleging that the European Community, Belgium, France, Italy, the United Kingdom, Austria, and Sweden had subsidized the production of stainless and alloy tool steel (specialty steel) in a manner inconsistent with their obligations under articles 8 and 11 of the Agreement on the Interpretation and Application of Articles VI, XVI, and XXIII of the General Agreement on Tariffs and Trade (Subsidies Code).

Notice of the institution of the investigation and the scheduling of a public hearing to be held in connection with the investigation was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, D.C., and by publishing the notice in the Federal Register of December 15, 1982 (47 F.R. 56218). 3/ A public hearing was held on February 9 and 10, 1983, at which time all persons who requested the opportunity were afforded an opportunity to be present, to present evidence, and to be heard. 4/ The Commission voted in this investigation on March 24, 1983.

1/ A copy of the USTR's letter is presented in app. A.
2/ A copy of the President's determination is presented in app. B.
3/ A copy of the Commission's notice is presented in app. C.
4/ A calendar of witnesses who appeared at the public hearing is presented in app. D.

Section 301 Investigation Concerning the Subject Products

On December 2, 1981, the Tool and Stainless Steel Industry Committee and the United Steelworkers of America filed a petition with the USTR pursuant to section 301 of the Trade Act of 1974, 19 U.S.C. 2411 (supp. III, 1979). The petition was filed on behalf of the specialty steel industry of the United States and challenged the alleged bestowal of unreasonable and discriminatory subsidies by the Governments of Austria, Belgium, Brazil, France, Italy, Sweden, and the United Kingdom. The petition alleged that the dramatic increase in the import penetration of specialty steel products (stainless steel sheet and strip, plate, bar, wire rod, and alloy tool steel) from these countries was the direct result of these subsidies, and that these imports burdened or restricted U.S. commerce and caused or threatened to cause injury to the U.S. industry. The petition further alleged that the use of these subsidies violated the obligations of these nations arising under the provisions of the General Agreement on Tariffs and Trade (GATT) and articles 8 and 11 of the Agreement on Interpretation and Application of Articles VI, XVI, and XXIII of the GATT (the Subsidies Code).

On February 26, 1982, the USTR initiated investigations concerning the allegations made with respect to five of the seven countries named in the petition: Austria (301-27), France (301-28), Italy (301-29), Sweden (301-30), and the United Kingdom (301-31). 1/ At the same time, the USTR decided not to initiate investigations concerning the petitioners' allegations with respect to Brazil and Belgium. Petitioners filed a new petition concerning Belgium on June 23, 1982, which contained new information that provided sufficient grounds for USTR to initiate, on August 9, 1982, an investigation of alleged subsidies provided to the specialty steel industry in Belgium.

On October 26, 1982, pursuant to section 304 of the Trade Act, the USTR recommended to the President the action he should take in the aforementioned cases, and on November 16, 1982, the President issued his determination. 2/ The determination directs the USTR to (1) request the U.S. International Trade Commission to conduct an expedited investigation under section 201 of the Trade Act of 1974 with regard to the five specialty steel products subject to the 301 investigations (2) initiate multilateral and/or bilateral discussions aimed at the elimination of all trade distortive practices in the specialty steel sector and (3) monitor imports of specialty steel products subject to the 201 proceeding.

1/ 47 F.R. 10107.
2/ 47 F.R. 51717.

Past Section 201 and 203 Commission Investigations

The Commission has conducted four prior investigations on stainless steel and alloy tool steels (specialty steels) under section 201 and 203 of the Trade Act of 1974. 1/

In the first of these investigations, No. TA-201-5, the Commission determined in January 1976 that certain stainless steel and alloy tool steel products (bars, wire rods, plates, sheets and strip) were being imported into the United States in such increased quantities as to be a substantial cause of serious injury, or threat thereof, to the domestic industry producing articles like or directly competitive with the imported articles. The Commission also determined that certain stainless steel and alloy tool steel products (ingots, blooms, billets, slabs, and sheet bars) were not being imported in such increased quantities as to be a substantial cause of serious injury to the domestic industry.

The President determined that import relief should be provided on the items for which the Commission had made an affirmative determination and on June 11, 1976, issued Proclamation No. 4445, which set quotas on these items for a 3-year period. The relief was to be phased down during the 3-year period (i.e., the quotas were to be increased by 3 percent annually). The quotas were on a trading area or country-by-country basis with respect to the larger suppliers. 2/

Prior to proclaiming such relief, the President sought to negotiate orderly marketing agreements with the leading sources of the products in question. Only Japan expressed a willingness to negotiate such an agreement. The quantitative restrictions proclaimed with respect to imports from Japan reflected the terms of an agreement signed with the Government of Japan on June 11, 1976, 3/ providing for the limitation of imports from Japan for a 3-year period beginning June 14, 1976.

1/ Stainless Steel and Alloy Tool Steel: Report to the President on Investigation No. TA-201-5 . . ., USITC Publication 756, January 1976; Cetain Alloy Tool Steel: Report to the President on Investigation No. TA-203-2 . . ., USITC Publication 805, February 1977; Stainless Steel and Alloy Tool Steel: Report to the President on Investigation No. TA-203-3 . . ., USITC Publication 538, October 1977; Stainless Steel and Alloy Tool Steel: Report to the President on Investigation No. TA-203-5 . . . , USITC Publication 968, April 1979.

2/ There were six basic source categories: (1) Japan, (2) the European Community, (3) Canada (4) Sweden, (5) all other countries entitled to col. 1 rates of duty, and (6) all other countries.

3/ See Agreement on Specialty Steel Imports, June 1976, United States-Japan, TIAS No. 8442.

On October 14, 1976, the Commission received a request from the Special Representative for Trade Negotiations (STR) (now the United States Trade Representative) that an investigation be conducted for the purpose of advising the President as to the probable economic effect on the domestic industry of terminating in part the relief imposed by Proclamation No. 4445 (as modified by Proclamation No. 4477) by excluding from the quantitative restrictions bearing steel covered by item 923.25 of the appendix to the TSUS. On February 14, 1977, the Commission advised the President, following completion of investigation No. TA-203-2, Certain Alloy Tool Steel, that the effect of such termination would be negligible. The President, on June 15, 1977, issued Proclamation No. 4509, terminating the quantitative restrictions on certain alloy tool steel (bearing steel).

On May 25, 1977, the STR requested advice from the Commission under section 203(i)(2) concerning the probable economic effect on the industry concerned if the relief provided by Proclamation No. 4445, as modified by Proclamations Nos. 4477 and 4509, were to be terminated or reduced. In response to this request, the Commission instituted investigation No. TA-203-3, Stainless Steel and Alloy Tool Steel, on June 19, 1977. As a result of the investigation, Commissioners Moore and Bedell advised the President on October 14, 1977, that termination or reduction of the relief could have a serious adverse economic effect. Chairman Minchew advised that chipper knife or band saw steel could be removed from the quota without an adverse economic impact and that the quotas on the remaining articles could be increased by 6.7 percent but should not be further increased or terminated. Commissioner Ablondi advised that the termination or reduction of the relief would have no substantial adverse impact. Following receipt of this advice, the President issued Proclamation No. 4559 on April 5, 1978, modifying the import relief so as to exclude so-called chipper knife steel and band saw steel from the quota on alloy tool steel under item 923.26 of the Appendix to the Tariff Schedules of the United States. The quotas applicable to the remaining articles under TSUS item 923.26 for the European Community (EC) and Sweden, the primary sources of such alloy tool steel, were reduced to take into account this change in quota coverage. This modification became effective April 8, 1978.

On December 11, 1978, following receipt of a petition on November 30, 1978, filed by the Tool and Stainless Steel Industry Committee and the United Steelworkers of America, AFL-CIO, the Commission instituted an investigation under subsection 203(i)(2) and (i)(3) of the Trade Act of 1974 for the purpose of gathering information in order that it might advise the President of its judgment as to the probable economic effect on the domestic industry of the termination of import relief presently in effect with respect to the stainless steel and alloy tool steel under TSUS items 923.20 through 923.26, inclusive. Such import relief was scheduled to terminate on July 13, 1979, unless extended by the President.

On April 24, 1979, Commissioners Alberger and Stern advised the President that the termination of the quantitative restrictions imposed on imports of stainless steel and alloy tool steel would have little, if any, adverse impact on the domestic industry. Commissioners Moore and Bedell advised the President that termination of the quantitative import restrictions would have a serious adverse economic effect on the domestic industry. Commissioner Parker did not participate in the investigation.

On June 12, 1979, the President issued Proclamation No. 4665, which extended the temporary quantitative limitations imposed by Proclamation No. 4445, as amended, for the period of June 14, 1979, through February 13, 1980. Import relief was terminated on February 14, 1980.

Recent and Pending Antidumping and Countervailing Duty Investigations

Since January 1982 the Commission has conducted a number of antidumping and countervailing duty investigations involving specialty steel products. In the countervailing duty area, four cases have been instituted on specialty steel. The first was Hot-Rolled Stainless Steel Bar, Cold-Formed Stainless Steel Bar and Stainless Steel Wire Rod from Spain investigations Nos. 701-TA-176-178. Final determinations in these investigations were made in December 1982. The Commission made a negative determination on hot-rolled stainless steel bar and cold-formed stainless steel bar (Chairman Eckes dissenting) and an affirmative determination on stainless steel wire rod.

In the remainder of the countervailing duty and antidumping investigations, only preliminary determinations have been made. A list of these investigations and the tentative due dates of the Commission's final determinations is presented in the following tabulation:

Investigation (s) No. (s)	Products	Country	Tentative due dates
701-TA-179-181	Hot-rolled stainless steel bar, cold-formed stainless steel bar, and stainless steel wire rod.	Brazil	6-23-83
701-TA-187	Certain tool steel.	Brazil	7-11-83
701-TA-195-196	Stainless steel sheet and strip and stainless steel plate.	United Kingdom	6-9-83
731-TA-92	Stainless steel sheet and strip.	West Germany	6-9-83
731-TA-95	Stainless steel sheet and strip.	France	6-9-83
731-TA-100	Certain tool steel.	West Germany	7-11-83

Description and Uses

The products

Stainless steel is an alloy steel containing, by weight, less than 1 percent of carbon and over 11.5 percent of chromium. Generally manufactured from scrap by means of electric furnaces, stainless steel may include such alloying elements as nickel, molybdenum, and manganese, all of which are (1) added to the melt when the furnace is being charged, (2) added during melting, or (3) added after tapping but before pouring from ladle to ingot mold or continuous caster. The alloying ingredients improve performance under chemical or temperature stress and impart corrosion resistance to the product.

Stainless steel can be readily fabricated or welded and can be tempered to many times the strength of ordinary carbon steel. It can be produced in an attractive silvery color and is produced in dull, brushed, or polished finishes. It is used extensively in the food, chemical, textile, pollution control, and electric power industries in applications that require exceptional strength and resistance to oxidation.

The stainless steel products 1/ which are the subject of this investigation include:

(1) Stainless steel sheet and strip, and stainless steel plate

Stainless steel sheet and strip are flat-rolled steel products produced by passing slabs or sheet bars through a series of reducing rolls on continuous or hand mills. They are generally considered to be finished products and are distinguished from other flat-rolled products by their dimensions. The Tariff Schedules of the United States Annotated (TSUSA) defines sheets as "flat-rolled products whether or not corrugated or crimped, in coils or cut to length, under 0.1875 inch in thickness and over 12 inches in width" and strip as "a flat-rolled product whether or not corrugated or crimped, in coils or cut to length, under 0.1875 inch in thickness, and, if cold-rolled, over 0.50 inch but not over 12 inches in width, or if not cold-rolled, not over 12 inches in width" (headnote 3(g) and (h), subpt. B, pt. 2, of schedule 6).

Stainless steel sheet and strip are produced primarily on continuous mills. In this production process, slabs are conditioned and rolled into coil form on a continous hot strip mill. The coil then is annealed, through either the continuous or the batch anneal process, descaled, and cold-reduced to a

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1/ Four domestic firms produce a sheet product for use in catalytic converters. This product was developed in 1974 to provide a low-cost material which was heat- and corrosion-resisted. The material is classified as grade 409 stainless by the American Iron & Steel Institute. However, the product contains less than 11.5 percent chromium and, therefore, is not within the TSUSA definition of stainless steel nor within the scope of this investigation. Annual consumption of this product is estimated to range from 65,000 tons to over 100,000 tons, depending on demand for automobiles. Imports of this product in recent years are thought to have been nil.

specified thickness. The product is subsequently further annealed, and descaled, and may be cut to length. To obtain improved surface and mechanical properties and lighter gages, the material is cold-rolled. Cut lengths then can be flattened by roller leveling or stretcher leveling.

Stainless steel sheet and strip produced on hand mills are rolled from sheet bars. This process, although it has been almost totally replaced by the continuous method, is important in producing certain grades of stainless steel that are difficult to roll on the continous mill and certain widths exceeding the limits of the continuous rolls. In this process, the product is rolled in lengths, annealed, and descaled. It may then be subjected to further operations, including cold-reduction, annealing, descaling, and light cold-rolling.

The TSUSA defines razor blade steel as "stainless steel strip not over 0.010 inch in thickness and not over 0.9 inch in width, containing by weight not less than 0.6 percent and not over 0.75 percent carbon, and containing by weight not less than 11.5 percent not over 14.7 percent chromium, certified at the time of entry to be used in the manufacture of razor blades (headnote 2(h)(ix), subpt. B, pt. 2 of schedule 6)." The manufacture of razor blade steel is similar to that of other stainless steel strip. Razor blade steel must be cold rolled in order for the manufacturer to achieve the thinness and finish required.

The TSUSA defines plates as "flat-rolled products whether or not corrugated or crimped, in coils or cut to length, 0.1875 inch or more in thickness and . . . over 12 inches in width." The manufacturing process for stainless steel plate is similar to that of stainless steel sheet and strip--by hot-rolling from slabs, after which the plate is usually annealed and pickled. In contrast to stainless steel sheet and strip, which is usually cold-rolled, stainless steel plate is generally shipped in hot-rolled, pickled form.

Important applications for stainless steel sheet are in food-processing equipment, chemical fertilizer tanks, liquid gas storage tanks, hospital equipment, and defense material. Stainless steel strip is used in automobiles, appliances, industrial equipment, and defense applications. Stainless steel plates are sold in various grades and finishes, and are most often used in construction and in industrial equipment for the chemical, oil and gas, and rubber-producing and rubber-processing industries.

(2) Stainless steel bar and stainless steel wire rod:

Stainless steel bars are stainless steel products of solid section, having cross sections in the shape of circles, segments of circles, ovals, triangles, rectangles, hexagons, or octagons. Hot-rolled stainless steel bar is produced by passing stainless steel billets through a series of heating, annealing, and reducing operations, until the billet has been reduced to a specific diameter and shape. The product may be sold in the hot-rolled form or further worked to produce cold-formed stainless steel bar. Such operations as cold-turning, rolling, and grinding enhance the bar's performance and appearance. Most bars range in size from about 0.25 inch to 1.5 inches in

diameter and are semifinished products used in such diverse applications as the production of fasteners, fittings, valves, welding electrodes, medical and dental instruments, automotive parts, and flatware.

Stainless steel wire rod is defined as a stainless steel coiled, semifinished, hot-rolled product of solid cross section, approximately round in cross section, not under 0.20 inch nor over 0.74 inch in diameter. The manufacturing process for stainless steel wire rod is very similar to that of stainless steel bar, except that the hot-rolled billet is coiled after it is reduced to the specific diameter required. The coil may then be dipped in a combination of acid baths and coated with a lubricant containing copper, lime, or oxolate. This coating facilitates further lubrication when the rod is later cold-drawn into wire, the largest end use of wire rod. Other major end uses of stainless steel wire rod include industrial fasteners, medical and dental instruments, and orthodontic devices.

(3) Tool steel products:

For the purpose of this investigation, tool steel, as defined by the TSUSA, 1/ includes chipper knife steel, 2/ band saw steel, 3/

1/ Tool steel refers to alloy steel which contains the following combinations of elements in the quantity, by weight, as indicated:

(A) not less than 1.0 percent carbon and over 11.0 percent chromium; or
(B) not less than 0.3 percent carbon and 1.25 percent to 11.0 percent inclusive chromium; or
(C) not less than 0.85 percent carbon and 1.0 percent to 1.8 percent inclusive manganese; or
(D) 0.9 percent to 1.2 percent inclusive chromium and 0.9 percent to 1.4 percent inclusive molybdenum; or
(E) not less than 0.5 percent carbon and not less than 3.5 percent molybdenum; or
(F) not less than 0.5 percent carbon and not less than 5.5 percent tungsten.

2/ Chipper knife steel refers to alloy tool steel which contains, in addition to iron, each of the following elements, by weight, in the amount specified:

carbon:	not less than 0.48 nor more than 0.55 percent;
manganese:	not less than 0.20 nor more than 0.50 percent;
silicon:	not less than 0.75 nor more than 1.05 percent;
chromium:	not less than 7.25 nor more than 8.75 percent;
molybdenum:	not less than 1.25 nor more than 1.75 percent;
tungsten:	none, or not more than 1.75 percent; and
vanadium:	not less than 0.20 nor more than 0.55 percent.

3/ Band saw steel refers to alloy tool steel which contains, in addition to iron, each of the following elements, by weight, in the amounts specified:

carbon:	not less than 0.47 nor more than 0.53 percent;
manganese:	not less than 0.60 nor more than 0.90 percent;
sulfur:	none, or not more than 0.015 percent;
phosphorus:	none, or not more than 0.025 percent;
silicon:	not less than 0.10 nor more than 0.25 percent;
chromium:	not less than 0.90 nor more than 1.10 percent;
nickel:	not less than 0.50 nor more than 0.70 percent;
molybdenum:	not less than 0.90 nor more than 1.10 percent; and
vanadium:	not less than 0.08 nor more than 0.15 percent.

high-speed steel, 1/ and other tool steels (except bearing steels). 2/ These types of tool steel are provided for in the TSUSA, which defines them on the basis of chemical composition. Although tool steel may be produced in sheet, strip, and plate form, the large majority (87 percent) of all tool steel shipments, as reported by the American Iron & Steel Institute (AISI), for 1981 were in the form of bar and wire rod. 3/

The production process for tool steel products is similar to that of other steel products once the product has reached the billet stage, except that the relatively small quantities of tool steel produced make continuous rolling operations uneconomical. Tool steel is therefore rolled on hand mills, which requires that billets be light enough to be lifted manually. 4/ Tool steel is typically subjected to numerous grinding, turning, and straightening operations before it is shipped, to insure more exact specifications and performance.

All tool steels have three properties in common in varying degrees:

1) The ability to resist softening at elevated temperatures. This is referred to as hot-hardness.
2) Resistance to wear of the tool area when in contact with the workpiece. This is referred to as wear resistance.
3) A combination of strength and ductility, often referred to as toughness.

The American Iron & Steel Institute divides tool steels into four principal groupings, which are determined by the properties of the steels:

High-speed tool steels
Hot-work tool steels
Cold-work tool steels
Mold steels

High-speed tool steels are characterized by their ability to retain their hardness at elevated temperatures (red hardness). For this reason, their principal use is in metal-cutting applications, such as broaches, drills, end

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1/ High-speed tool steel refers to all tool steel which contains, by weight, not less than 0.5 percent carbon and not less than 3.5 percent molybdenum; or not less than 0.5 percent carbon and not less than 5.5 percent tungsten.

2/ Tool steel of the type described in headnote 2(h)(vii), subpt. B, pt. 2 of schedule 6 (also known as bearing steel) is therefore not included in this investigation.

3/ See Certain Tool Steels from Brazil and the Federal Republic of Germany . . ., prehearing report, Mar. 9, 1983. Production of tool steel sheet and strip is very small; some tool steel plate is produced, but virtually all of this product is then cut into bar-sized dimensions and sold in that form.

4/ There is believed to be a market in the United States for larger diameter (over 6 inches) stainless and tool steel bars. Such bars cannot be made on rolling mills, but are forged, a more expensive and time-consuming production process.

mills, lathes, milling machines, reamers, routers, and saws. High-speed tool steels can be subdivided into 2 categories: (1) M-type (molybdenum and tungsten bearing) and (2) T-type (tungsten-bearing only). High-speed tool steels first used tungsten as the principal hardening alloy, but molybdenum grades were subsequently developed due to that material's greater availability in the United States. Currently, the AISI lists 18 M-types and 7 T-types of high-speed tool steel as being produced in the United States. Each type provides varying degrees of red hardness, wear resistance, and toughness, and some may be interchangeable for a specific application.

Hot-work tool steels have superior ductility and toughness. They are designed for use on hot metal; as a result, they are rarely used in metal-cutting applications, but frequently used in metal-forming applications. Cold-work steels are designed for the forming of cold metal and, as such require greater hardness than the hot-work steels. The greater levels of carbon in these steels account for the improved hardness. These steels do not have acceptable hot-hardness properties and are therefore inappropriate for metal-cutting applications. Typical cold-forming applications for these steels include use in blanking, drawing, and forming dies.

Mold steels are low-alloy tool steels which are high in toughness, low in wear resistance, and moderate in hot hardness. Mold steels are used in plastic molds, zinc die-casting dies, and holder blocks.

Chipper knife steel is produced as individually rolled flats on hand mills from billet stock or as flat bars cut from rolled plates which are rolled on plate mills and then cut into flat bars by carbide-tipped saws. All chipper knife products must be annealed and flattened after hot-rolling. The plates or bars must be inspected for surface defects, macroetched for internal quality, and rated for depth of decarburization.

Chipper knife steel is used to make chipper knives, which are used in machines designed to chip wood into pulp and chips to be used in the lumber industry to make particleboard, in the paper industry to make paper and corrugated boxes, in sanitary systems, and in landscaping. Chipper knife steel generally has a chromium content of 8 percent, which makes it wear resistant, and a carbon content of 0.5 percent, which gives it wear hardness and toughness. Both properties are important in the chipping of lumber.

Band saw steel is used to produce band saw blades, which are metal-cutting blades used by machine shops and metal fabricators to cut semifinished metal down to a finished size. Band saw steel has a substantial carbon content, which accounts for its hardness.

Principal industries which make use of products made from tool steel include the automotive, aerospace, machine tool, and household appliance industries. However, because the applications for tool steel are so specialized, it is not possible to state end uses for these products by any particular industry; furthermore, any one industry may use a number of different types and grades of tool steels.

Although quality differences between imported and domestically produced stainless steel and tool steel products are sometimes alleged, these products are usually considered fungible when produced in the same grades and to the same specifications.

The production process

The production processes for carbon and specialty steel products follow the same general scheme but differ in important details, dictated by the more exact chemistry and performance characteristics demanded from specialty steels. As in carbon steel, production of specialty steel involves the conversion of iron ore or scrap and alloying elements into steel by heating and removing impurities. After the liquid steel has reached the desired chemistry, it is cast into a relatively few semifinished shapes, after which it is forged, rolled, cut, extruded, and so forth, into a wide variety of finished forms and finishes.

Important production cost differences between carbon and specialty steelmaking are in the first stage of the production process--the conversion of raw materials into liquid steel. In a typical process, specialty steel production begins with the melting of the raw material (usually selected scrap) in an electric furnace. 1/ The resultant liquid steel is transferred to an argon-oxygen decarbonization (AOD) vessel, where alloying elements such as chromium, nickel, and molybdenum are added. The liquid is refined by blowing with argon or other inert gases, and alloying elements are added until the desired chemistry is reached. The molten liquid is then poured into preheated ladles, which transfer it to slab, bloom, or billet casters for solidification into semifinished shapes. 2/

Depending on the desired chemistry of the finished product, additional refining techniques may be employed by specialty steel producers. One process used in the manufacture of tool steel involves the casting of an ingot in the first melt, which is then used as a consumable electrode in a second "remelt" furnace. The electrode is remelted, further impurities are removed, and the ingot is recast and ready for roughing down to the semifinished shape. Such techniques as electroslag remelting, vacuum arc remelting, and vacuum induction furnaces are used to achieve higher purity and uniformity levels.

U.S. Tariff Treatment

Imports of stainless steel sheet and strip and stainless steel plate are classified for tariff purposes under items 607.7610, 607.9010, 607.9020, 608.2600, 608.2900, 608.4300, 608.5700, 607.7605, and 607.9005 of the TSUSA.

1/ Virtually all specialty steel in the United States is produced in electric furnaces, whereas only 25 percent of carbon steel is produced by this method.

2/ The use of continuous equipment is widespread in the stainless steel industry. * * *. However, when very high levels of purity or alloy content are required, as in the production of tool steels, continuous casters cannot be used. Therefore, all tool steel must be ingot cast.

The current column 1 (most-favored-nation) rates of duty 1/ and column 2 duty rates 2/ are shown in table 1, app. E. 3/

The rates of duty for imports of stainless steel sheet and strip and stainless steel plate, which are currently dutiable at column 1 rates ranging from 9.5 percent to 11.5 percent ad valorem plus additional duties on alloy content, 4/ have remained virtually unchanged since 1977. Imports of articles entered under these items numbers are not eligible for duty-free treatment under the Generalized System of Preferences (GSP), 5/ nor are least developed developing countries (LDDC's) granted preferential rates of duty, with the exception of razor blade steel (TSUSA item 608.2600). This item has an LDDC rate of 5.1 percent ad valorem, plus additional duties. 6/

Imports of stainless steel bar are classified for tariff purposes under items 606.9005 and 606.9010 of the TSUSA, 7/ and imports of stainless steel wire rod are classified under TSUS items 607.26 and 607.43. The current column 1 (most-favored-nation) rates of duty and column 2 duty rates on these items are shown in table 2. The rates of duty for imports of stainless steel bar, currently dutiable at the column 1 rate of 10.5 percent ad valorem, and of the two types of wire rod, dutiable at the column 1 rates of 4.3 or 4.6 percent ad valorem, have not changed since 1978. 8/ Imports of these products are also subject to additional duties on alloy content; however, they are not eligible for duty-free treatment under the GSP, nor are imports from the LDDC's granted preferential treatment. There were no concessions granted for these items under the Tokyo round of the Multilateral Trade Negotiations.

1/ The col. 1 rates are applicable to imported products from all countries except those Communist countries and areas enumerated in general headnote 3(f) of the TSUSA.

2/ The rates of duty in col. 2 apply to imported products from those Communist countries and areas enumerated in general headnote 3(f) of the TSUSA.

3/ Tables 1 to 46 are presented in app. E.

4/ Headnote 4, pt. 2, subpt. B, schedule 6, of the TSUSA.

5/ The GSP, under title V of the Trade Act of 1974, provides duty-free treatment for specified eligible articles imported directly from designated beneficiary developing countries. GSP, implemented by Executive Order No. 11888, of Nov. 24, 1975, applies to merchandise imported on or after Jan. 1, 1976, and is expected to remain in effect until January 1985.

6/ The preferential rates of duty in the "LDDC" column reflect the full U.S. Multilateral Trade Negotiations concession rates implemented without staging for particular items which are products of LDDC's, enumerated in general headnote 3(d) of the TSUSA. Where no rate of duty is provided in the "LDDC" column of the TSUSA for an item, the rate of duty provided in col. 1 applies.

7/ The scope of these items was modified in October 1980 to include wire, cut to length, which was transferred from items 609.3020 (pt.), 609.3322 (pt.), 609.4510 (pt.), 609.4540 (pt.), 609.4550 (pt.) and 609.7600 (pt.).

8/ Prior to 1980, the rates of duty on wire rod were compound rates. On Jan. 1, 1980, those rates were converted to ad valorem equivalents.

Imports of the tool steel products which are subject to this investigation are in the form of sheets and strips, plate, bars, wire rods, and round wire (high-speed tool steel only) and are provided for in TSUSA items 606.9300, 606.9400, 606.9505, 606.9510, 606.9520, 606.9525, 606.9535, 606.9540, 607.2800, 607.3405, 607.3420, 607.4600, 607.5405, 607.5420, 607.7205, 607.7220, 607.8805, 607.8820, 608.3405, 608.3420, 608.4905, 608.4920, 608.6405, 608.6420, 609.4520, and 609.4550. The current column 1 rates of duty and column 2 rates of duty on these items are shown in table 3. No duty-free treatment under the GSP nor preferential treatment for the LDDC's has been granted.

Transportation costs

The actual cost of transporting steel is primarily a function of shipping distance and weight. Because stainless and tool steel are higher priced than carbon steel, transport costs represent a smaller share in the delivered price of specialty steel articles. 1/ Data collected from U.S. producers show that transport costs as a percentage of shipment value range from an average of 0.9 to 3.1 percent for stainless steel, and an average of 0.8 to 2.9 percent for tool steel, as shown in the following tabulation (in percent): 2/ For carbon steel products, transportation costs as a percentage of sales price ranged from 6 to 35 percent in 1982.

Product and distance shipped	Percentage of total sales shipped at that distance	Transportation costs as a percentage of total shipment value for shipments by truck
Stainless steel:		
0 to 100 miles	2.9	0.9
100 to 200 miles	19.7	1.1
200 to 500 miles	46.1	1.7
Over 500 miles	31.3	3.1
Tool steel:		
0 to 100 miles	7.4	.8
100 to 200 miles	14.3	1.2
200 to 500 miles	41.2	2.0
Over 500 miles	36.6	2.9

1/ In 1982, specialty steel prices ranged from $1,580 per ton to $8,269 per ton, substantially higher than unit prices for carbon steel prices.

2/ The high end of these ranges correspond to shipping distances over 500 miles. These percentages are averages; transport costs as a percentage of total price would most likely be more significant for the lower priced specialty steel specifications, and less significant for the higher priced specifications.

In addition to price-related factors, locational factors influence transportation costs. A higher proportion of specialty steel is produced and sold in the northeast and north central areas of the United States than is the case for carbon steel. Consequently, the lower average length of haul leads to relatively lower transport costs for specialty steel. Estimates derived from data collected from U.S. specialty steel producers show that 61 percent of stainless steel is shipped to customers located less than 500 miles from the mill, and 63 percent, for tool steel.

Domestic Producers

Producers of stainless steel and alloy tool steel products are often referred to as specialty steel producers. Whereas the great bulk of their production is represented by stainless and alloy tool steel products, they frequently are capable of producing other specialty steel products, such as silicon electric steels, magnetic materials, high-temperature and high-strength alloy steels, valve steels, and bearing steels. Likewise, some firms produce stainless steel products not subject to this investigation, such as stainless steel pipe and tube, and stainless steel wire products.

Currently, about 29 domestic firms produce stainless steel and/or alloy tool steel products; 11 of the firms produce only stainless steel, 8 produce only alloy tool steel, and 10 produce both. Producers are located in the northeast and north central regions of the United States, with a large concentration of producers in western Pennsylvania (fig. 1). A list of the U.S. producers of stainless and alloy tool steel products identified by the Commission is presented in table 4.

The specialty steel industry, like the carbon steel industry, is highly concentrated, with a few producers accounting for the bulk of shipments in each product line. Although five large carbon steel firms produce one or more of the specialty steel products subject to this investigation, only in stainless steel sheet and strip do firms that produce carbon steel products account for a significant share of domestic shipments of specialty steel (44 percent). In the other products subject to this investigation, firms whose principal business is specialty steel production dominate the market. The trend in the industry is for specialty steel producers to concentrate in a relatively few product lines. The major producers of the products subject to the investigation and their share of U.S. producers' shipments in 1982 are presented in the following tabulation:

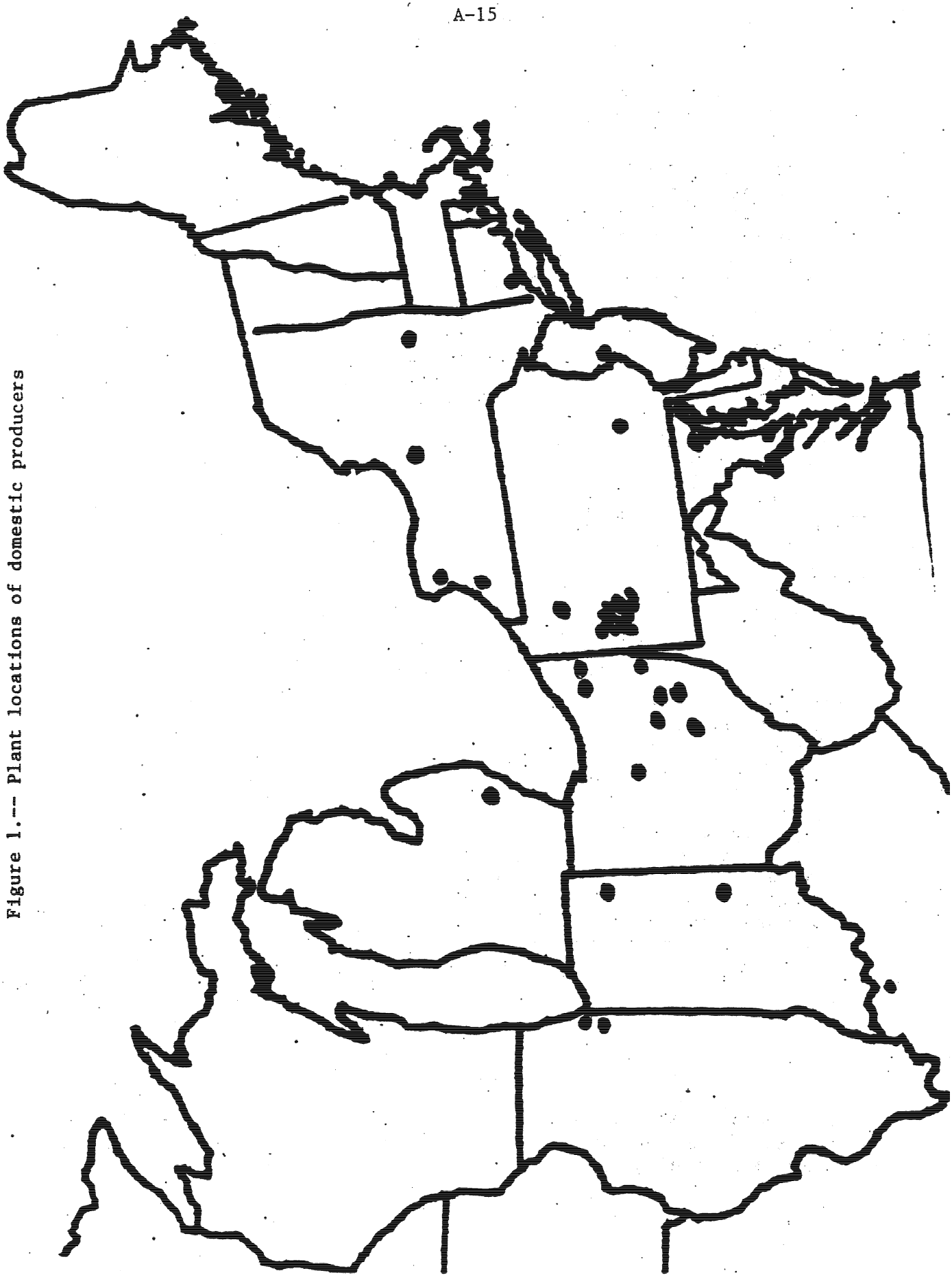

Figure 1.-- Plant locations of domestic producers

Item and producer	Share of U.S. producers' shipments (percent)
Stainless steel sheet and strip:	
Allegheny Ludlum	***
Armco, Inc. 1/	***
Cyclops	***
Jones & Laughlin 1/	***
Republic	***
	***
Stainless steel plate:	
Allegheny Ludlum	***
Eastern Stainless	***
Ingersoll 1/	***
Jessop	***
Jones & Laughlin 1/	***
	***
Stainless steel bar:	
Al Tech Specialty Steel Corp	***
Armco, Inc 1/	***
Carpenter Technology Corp	***
Crucible	***
Joslyn Div. of Slater Steel Inc	***
	***
Stainless steel wire rod:	
Al Tech Specialty Steel Corp	***
Armco, Inc 1/	***
Carpenter Technology Corp	***
	***
Alloy Tool Steel:	
Bethlehem Steel Co	***
Carpenter Technology Corp	***
Crucible, Inc	***
Jessop Steel Co	***
Latrobe Steel Co	***
	***

1/ Carbon steel producer.

U.S. Importers

The specialty steel products which are subject to this investigation are imported into the United States by four types of importers: trading companies affiliated with a foreign producer which handle that producer's exports and

may sometimes handle those of other foreign producers; 1/ trading companies which are not affiliated with a foreign producer but import from a number of sources; distributors and end users which import directly from foreign sources. 2/ The majority of imports of specialty steel products enter the United States through the first two types of organizations. The following list shows the major importers, by countries, of the subject products:

Country	Company
Japan	* * *
	* * *
	* * *
	* * *
	* * *
	* * *
France	* * *
	* * *
West Germany	* * * 1/
	* * * 1/
	* * * 1/
United Kingdom	* * * 1/
	* * * 1/
Belgium	* * *
Sweden	* * * 1/
	* * * 1/
Spain	* * * 1/
	* * *
Brazil	* * *
	* * *

1/ Affiliated with a foreign producer.

U.S. Market

Demand for stainless steel and alloy tool steel is derived from the demand for the end products in which they are used, such as automobiles, machinery, industrial equipment, appliances, electrical equipment, food-processing equipment, utensils, cutlery, liquid-nitrogen gas tankers,

---

1/ Trading companies typically sell "back to back," that is they import steel according to orders received in advance. The purchaser picks up the steel at the port of importation.

2/ Some distributors may also be affiliated with foreign producers.

tools, dies, and other durable goods. The durability of many articles made from stainless steel is a factor that permits discretion in the timing of purchases of replacement articles; consequently, fluctuations in the overall U.S. economy usually result in changes in demand for specialty steel articles which are much sharper than the changes that are applicable to nondurable goods and to most other types of durable goods.

Apparent consumption

Consumption of the stainless steel and alloy tool steel products covered by this investigation has fluctuated throughout the 1978-82 period (table 5). Consumption of stainless steel increased from 1.2 million tons in 1978 to 1.3 million tons in 1979, fell to 996,000 tons in 1980, and then increased to 1.1 million tons in 1981 (table 6). Consumption declined sharply in 1982 to 934,000 tons. Alloy tool steel consumption increased from 1978 to 1979 and then steadily declined from 126,000 tons in 1979 to 83,000 tons in 1982 (table 11). The following table presents annual changes in U.S. producers' shipments, U.S. imports, and apparent U.S. consumption.

Stainless steel and alloy tool steel: U.S. shipments, imports, and apparent consumption, 1978-82

Item	1978	1979	1980	1981	1982
	Quantity (1,000 short tons)				
Stainless steel:					
Producers' shipments	1,060	1,215	1,005	1,041	809
Imports	138	117	100	140	163
Consumption	1,152	1,263	996	1,120	934
Alloy tool steel:					
Producers' shipments	92	96	79	67	45
Imports	25	34	30	36	40
Consumption	112	126	106	99	83
	Percentage change				
Stainless steel:					
Producers' shipments	1/	14.6	-17.3	3.6	-22.3
Imports	1/	-15.2	-14.5	40.0	16.4
Consumption	1/	9.6	-21.1	12.4	-16.6
Alloy tool steel:					
Producers' shipments	1/	4.3	-17.7	-15.2	-32.8
Imports	1/	36.0	-11.8	20.0	11.1
Consumption	1/	11.1	-15.9	- 6.6	-16.2

1/ Not available.

Source: Producers' shipments, compiled from data of the American Iron & Steel Institute; imports, compiled from official statistics of the U.S. Department of Commerce.

As shown in the preceding table, producers' shipments closely followed the trend in consumption, but imports reacted in a different manner. Imports of stainless steel declined in 1979, although consumption increased. In 1980 and 1981, imports followed the same trend as consumption but increased and declined at a much faster rate. In 1982, stainless steel imports ran counter to the trend in both producers' shipments and consumption, increasing over 16 percent; shipments and consumption declined 22 and 17 percent, respectively. Imports of alloy tool steel followed the same trend as shipments and consumption until 1981, when they increased 20 percent as shipments and consumption fell. Imports continued to increase in 1982 as shipments and consumption declined further.

Tables 6-11 show data on U.S. producers' shipments, exports, imports, and apparent consumption for (1) stainless steel, (2) stainless steel sheets and strip, (3) stainless steel plate, (4) stainless steel bar, (5) stainless steel wire rod, and (6) alloy tool steel, all forms. 1/ These tables show that although consumption of stainless steel sheet and strip and plate followed the same trend as aggregate specialty steel consumption, stainless steel bar and wire rod and alloy tool steel have experienced steady declines in consumption since 1979. Apparent consumption for all stainless steel lines declined by about 25 percent from 1979 to 1982. For tool steel, apparent consumption declined 34 percent over the same period.

Channels of distribution

In the U.S. market, sales of specialty steel products which are the subject of this investigation are made directly to end users or to steel service centers/distributors, which in turn sell to end users. Because of the wide variety of stainless steel and alloy tool steel products, as well as the many diverse applications for these products, a high share of U.S. producers' shipments of most specialty steel products goes first to service centers/distributors rather than to end users. Service centers/distributors are essentially middlemen which buy large quantities of steel from producers, warehouse the steel, and sell smaller quantities to end users. The service centers may also have some simple finishing equipment, such as equipment to slit strip from sheet, or cut bars from plate, to satisfy customer specifications. Some products, notably strip, rod, and tool steel, are sold directly to end users by producers. The major markets served in 1981 by the products which are the subject of this investigation are shown in table 12.

The Question of Increased Imports

U.S. imports

Data on U.S. imports for consumption by product category are shown in tables 13 to 19. Aggregate imports of stainless steel, which were subject to various import restraints until February 1980, increased from about 138,000 short tons, valued at $203 million, in 1978 to 162,000 short tons, valued at

1/ Combined data on stainless steel bar and wire rod are presented in app. F.

$282 million, in 1982. Alloy tool steel imports also increased from 25,000 tons, valued at $56 million, in 1978 to 41,000 tons, valued at $92 million, in 1982. The following table shows imports for the period 1978-82.

Stainless steel and alloy tool steel: U.S. imports for consumption, by types, 1978-82

(In thousands of short tons)

Product	1978	1979	1980	1981	1982
Stainless steel:					
Sheets and strip	82	62	38	72	87
Plate	11	7	3	8	13
Bar 1/	27	29	37	35	40
Wire rod	18	18	22	25	22
Total	138	117	100	140	163
Alloy tool steel	25	34	30	36	40
Total	163	150	130	176	203

1/ Imports of bar in 1981 were affected by of a tariff classification change (effective Oct. 17, 1980) which shifted imports of cut-to-length stainless steel wire from the statistical classification covering wire to the one covering cold-formed stainless steel bar. This modification of the tariff classification to include in TSUSA item 609.9010 (cold-formed bar) cut-to-length stainless steel wire formerly classified in TSUSA items 609.3020, 609.3320, 609.4510, 609.4540, and 609.7500 resulted from the enactment of Public Law 96-467 (sec. 20). This law was introduced to correct inequities in the importation of cut-to-length carbon steel wire; however, the modification covers all types of bar and wire. Imports of stainless steel wire of the type that was most likely to be classified as bar after Oct. 17, 1980 (TSUSA item 609.4540), declined from 1980 to 1981. However, of the major foreign sources of cold-formed bar, only imports from Spain and Brazil increased from 1980 to 1981. Counsel for the Swedish industry testified during the public hearing that the increase in Swedish cold-formed bar imports in 1981 was actually reclassified cut-to-length wire. No adjustments have been made to the import data in this report to reflect the 1980 change in the classification of stainless steel wire.

The principal sources of stainless steel imports in 1982 were Japan (23 percent), West Germany (19 percent), France (18 percent), and Spain (10 percent). The principal sources of alloy tool steel were Sweden (26 percent), West Germany (25 percent), and Japan (13 percent).

During the course of the public hearing and in subsequent posthearing briefs, counsel for importers argued that the use of the 1978-82 period to measure changes in import levels was inappropriate because of distortions caused by import quotas which restricted imports from June 1976 to February

1980. Data compiled from official statistics of the U.S. Department of Commerce on imports of stainless steel and alloy tool steel are provided in the following table.

Stainless steel and alloy tool steel: U.S. imports, by types, 1964-82

(In thousands of short tons)

Year 1/	Stainless Steel					Alloy tool steel
	Sheet and strip	Plate	Bar	Wire rod	Total	
1964	31	1	2	8	42	8
1965	44	1	5	9	59	12
1966	57	2	8	13	80	17
1967	68	4	10	13	95	17
1968	81	5	13	16	115	14
1969	79	7	13	15	114	15
1970	89	8	15	14	127	17
1971	107	10	16	13	147	13
1972	60	17	19	13	108	15
1973	45	11	20	17	93	23
1974	65	12	28	22	127	24
1975	66	17	29	17	130	24
1976	78	19	23	20	140	27
1977	70	8	25	17	120	21
1978	82	11	27	18	138	25
1979	62	7	29	18	117	34
1980	38	3	37	22	100	30
1981	72	8	35	25	140	36
1982	87	13	40	22	163	40

1/ Imports during 1969-74 were affected by a voluntary restraint arrangement (see discussion).

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

Imports of stainless and alloy tool steel products were affected during this period by a number of factors. A voluntary restraint arrangement (VRA) was established in early 1969. Japanese and European steel producers agreed to limit exports of all steel mill products to the United States during 1969-71. The agreement was based on tonnage, not value. As a result, foreign producers shifted their export product mix to stainless and alloy tool steels, which were higher priced than carbon steel products. Early in 1972, the VRA was extended until the end of 1974, and the United Kingdom was included along with the EC and Japan. At this time, specific export limitations were placed on stainless steel and tool steel products (the limitations applied to all stainless steel products), as well as all steel mill products. Once again the use of tonnage quotas resulted in a shift away from lower valued stainless

steel sheet and strip and plate to higher valued products such as stainless steel bar and alloy tool steels.

From January 1972 through March 1974, U.S. price controls suppressed the U.S. producers' prices for these products; however, the world price increased to levels equal to, or, depending on the product, above the U.S. price. This caused many foreign producers, particularly the Japanese, to limit their exports to the the United States and encouraged U.S. producers to export to higher priced foreign markets. In addition, antidumping orders were put in force in 1973, affecting imports of stainless steel plate from Sweden and stainless steel rod from France.

Although imports trends were somewhat distorted during 1969-80 by various factors, imports of both stainless steel and alloy tool steel reached their highest recorded levels in 1982 as apparent consumption fell to its lowest level.

Ratio of imports to production

Imports of stainless steel and alloy tool steel increased both in absolute terms and in relation to production during 1978-82. The ratio of imports of stainless steel to production increased from 13.8 percent in 1978 to 22.7 percent in 1982. The ratio of imports of alloy tool steel to production also increased, from 24.9 percent in 1978 to 85.2 percent in 1982, as shown in the following table:

Stainless steel and alloy tool steel: Ratio of U.S. imports to production, by types, 1979-81

(In percent)

Product	1978	1979	1980	1981	1982
Stainless steel:					
Sheets and strip	11.8	8.4	6.7	11.1	17.2
Plate	9.0	4.9	2.3	6.3	13.8
Bar	18.0	16.7	22.6	24.4	42.6
Wire rod	68.1	54.1	74.6	96.7	115.2
Sub total	13.8	10.7	11.1	14.8	22.7
Alloy tool steel	24.9	33.1	32.5	45.3	85.2
Averge	14.8	12.6	13.1	17.2	26.5

Source: Imports compiled from official statistics of the U.S. Department of Commerce; production compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

The Question of Serious Injury or Threat Thereof 1/

U.S. production

As shown in the following table, U.S. production of stainless steel declined irregularly from 997,000 tons in 1978 to 716,000 tons in 1982, or by 28 percent. Production of all product categories other than sheets and strip have declined since 1979. Alloy tool steel production peaked in 1979 at 102,000 tons, and then fell sharply to 47,000 tons in 1982, or by 54 percent.

Stainless steel and alloy tool steel: U.S. production, by types, 1978-82

(In thousands of short tons)

Period	Stainless steel					Alloy tool steel, all forms
	Sheets and strip	Plate	Bar	Wire rod	Total	
1978	694	127	150	26	997	99
1979	743	143	173	34	1,093	102
1980	577	127	163	29	896	92
1981	650	123	143	26	942	80
1982	507	96	94	19	716	47

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

U.S. production capacity and capacity utilization

Domestic producers' capacity to produce stainless steel and alloy tool steel and the utilization of that capacity during 1978-82 are shown in the following table.

1/ Data for this section of the report were compiled from information submitted in response to Commission questionnaires, except as noted. Producers' responding to questionnaires accounted for 90 percent of 1982 net shipments of stainless steel reported by the AISI, and 100 percent of alloy tool steel shipments.

Stainless steel and alloy tool steel: U.S. producers' practical capacity 1/ and capacity utilization, 1978-82

Item	1978	1979	1980	1981	1982
	Capacity (1,000 short tons)				
Stainless steel:					
Sheets and strip	953	981	972	1,063	1,098
Plate	221	222	223	224	224
Bar	225	232	232	232	234
Wire rod	48	46	45	45	45
Total	1,447	1,481	1,472	1,564	1,601
Alloy tool steel	228	227	227	231	205
Total	1,675	1,708	1,699	1,795	1,806
	Capacity utilization (percent)				
Stainless steel:					
Sheets and strip	72.8	75.8	59.4	61.2	46.2
Plate	57.7	64.5	57.0	55.0	42.6
Bar	66.4	74.6	70.0	61.4	40.2
Wire rod	54.7	72.9	65.2	57.8	42.7
Total	68.9	73.8	60.9	60.2	44.7
Alloy tool steel	43.5	44.9	40.6	34.5	22.8
Average	65.5	70.0	58.2	56.9	42.0

1/ Practical capacity was defined as the greatest level of output a plant can achieve within the framework of a realistic work pattern. Producers were asked to consider, among other factors, a normal product mix and an expansion of operations that could be reasonably obtained in their industry and locality in setting capacity in terms of the number of shifts and hours of plant operation.

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

Capacity to produce the stainless steel and alloy tool steel product forms subject to this investigation increased during 1978-82. However, as production fell so did capacity utilization. Stainless steel capacity utilization declined from a high of 73.8 percent in 1979 to 44.7 percent in 1982. Alloy tool steel utilization fell from 44.9 to 22.8 percent during the same period.

U.S. producers' shipments

Shipments by U.S. producers of stainless steel and alloy tool steel, as reported by the AISI, are shown in the following table.

Stainless steel and alloy tool steel: U.S. producers' shipments, by types, 1978-82

(In thousands of short tons)

Item	1978	1979	1980	1981	1982
Stainless steel:					
Sheets and strip	783	874	700	759	590
Plate	114	146	124	122	98
Bar	134	154	144	129	99
Wire rod	28	41	36	31	22
Total	1,060	1,215	1,005	1,041	809
Alloy tool steel	92	96	79	67	45
Total	1,152	1,311	1,083	1,108	854

Source: Compiled from American Iron & Steel Institute data.

Shipments of the stainless steel and alloy tool steel products considered here peaked in 1979, and then declined to about the 1978 level in 1980 and 1981 before dropping sharply in 1982. Shipments of stainless steel declined 22 percent from 1981 to 1982. Alloy tool steel shipments declined almost 35 percent.

U.S. exports

Exports of stainless steel and alloy tool steel, as reported by the U.S. Department of Commerce, ranged from 4 to 10 percent of U.S. producers' shipments during 1978-82. Exports peaked in 1980, and then declined sharply in 1981 and 1982. Major export markets in 1982 were Canada and Mexico.

Stainless steel and alloy tool steel: U.S. exports, by types, 1978-82

(In thousands of short tons)

Item	1978	1979	1980	1981	1982
Stainless steel:					
Sheets and strip	36	52	83	44	26
Plate	5	12	16	10	5
Bar	4	5	9	7	6
Wire rod	1	1/	1	1	1/
Total	47	69	108	61	37
Alloy tool steel	5	4	3	4	2
Total	51	74	112	65	39

1/ Less than 500 short tons.

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

Note: Because of rounding, figures may not add to the totals shown.

U.S. producers' inventories

Although end users and service centers/distributors perform much of the inventory function in the domestic market for stainless steel products, end-of-period inventories reported by U.S. producers in response to the Commission's questionnaires were significant, as shown in the following table.

Stainless steel and alloy tool steel: U.S. producers' inventories, by types, as of Dec. 31 of 1977-82

(In thousands of short tons)

Item	As of Dec. 31--					
	1977	1978	1979	1980	1981	1982
Stainless steel:						
Sheets and strip	169	184	178	160	158	157
Plates	16	19	19	21	19	18
Bars	38	38	39	46	48	41
Wire rod	3	3	3	2	4	3
Total	227	244	238	230	229	219
Alloy tool steel	63	48	47	47	48	39
Total	290	292	285	277	277	258

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

As shown in the following tabulation, inventory levels for tool steel products as a share of producer's shipments are generally higher than inventories for other types of steel, because the economies of scale found in the melting operation require the melting of a significant amount of steel, even though tool steel is ordered in small lots.

U.S. producers' inventories of stainless steel and alloy tool steel as a share of shipments, 1978-82

(In percent)

Item	1978	1979	1980	1981	1982
Stainless steel:					
Sheets and strip	24.4	23.6	26.9	24.2	30.8
Plate	14.8	13.5	18.7	15.0	18.4
Bar	25.6	22.4	29.6	34.1	40.6
Wire rod	13.1	9.4	8.5	15.7	15.9
Total	23.1	21.8	25.7	24.2	30.1
Alloy tool steel	47.0	44.6	50.9	58.5	67.6
Total	25.2	23.8	28.1	26.9	32.9

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

U.S. importers' inventories

Inventories of stainless steel and alloy tool steel reported by U.S. importers in response to Commission questionnaires gradually increased from 1979 to 1981 and then increased by 62 percent in 1982, as shown in the following table.

Stainless steel and alloy tool steel: Inventories of imported stainless steel and alloy tool steel 1/, as of Dec. 31 of 1978-82

(In short tons)

Item	As of Dec. 31--				
	1978	1979	1980	1981	1982
Stainless steel:					
Sheets and strip	3,332	2,153	2,025	4,949	13,822
Plate	1,386	954	768	318	4,015
Bar	6,397	5,684	8,688	8,094	4,702
Wire rod	200	57	457	643	926
Total	11,315	8,848	11,938	14,004	23,465
Alloy tool steel	11,684	10,619	8,014	7,189	11,535
Total	22,999	19,467	19,952	21,193	35,000

1/ U.S. importers' responding to Commission questionnaires accounted for 60 percent of total stainless steel and alloy tool steel imports in 1982.

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

Importers traditionally hold less inventory than domestic producers in this market. Since stainless steel and alloy tool steel are characterized by an assortment of grades and sizes, much of the inventory is held by distributors and thus is not reflected in these figures. * * *.

U.S. employment

The average number of production and related workers employed in establishments producing stainless steel and alloy tool steel, and the hours worked by those workers are shown in tables 20 and 21. The number of workers producing stainless and alloy tool steel and the hours worked declined during 1978-82, as shown in the following tabulation:

Year	Production and related workers		Hours worked	
	Stainless steel	Alloy tool steel	Stainless steel	Alloy tool steel
			1,000 hours	
1978	14,100	3,337	29,350	6,231
1979	15,083	3,264	31,379	6,577
1980	13,684	3,060	26,368	6,116
1981	13,359	2,778	25,335	5,319
1982	11,314	2,009	18,491	3,338

The sharpest declines in employment occurred in the stainless steel bar and alloy tool steel sectors, where employment fell 26.7 and 40.0 percent, respectively, from 1978 to 1982.

Wages paid to production and related workers and total compensation paid are shown in tables 22 and 23. Labor productivity, hourly compensation, and unit labor costs are presented in tables 24 and 25. Although labor productivity for stainless steel increased from 0.0339 ton per hour in 1978 to 0.0387 ton per hour in 1982, steady increases in hourly compensation paid to workers resulted in an increase in unit labor costs from $419.67 per ton in 1978 to $591.54 per ton in 1982. Productivity in the production of alloy tool steel declined from 0.0156 ton per hour in 1978 to 0.0134 ton per hour in 1982. Unit labor costs increased almost 100 percent, from $824.60 per ton in 1978 to $1,617.72 per ton in 1982.

Employees of most specialty steel producers are represented by the United Steelworkers of America, AFL-CIO. The union has indicated that, although steelworkers wages are high, total compensation costs for most foreign producers have grown at a faster rate than U.S. wages.

Financial experience of U.S. producers

Stainless steel and alloy tool steel.--Twenty-two producers of stainless steel and alloy tool steel provided financial data relative to overall stainless steel and alloy tool steel operations, together accounting for 90 percent of U.S. producers' shipments in 1982. These data are presented in table 26.

Overall stainless steel.--Fourteen producers of stainless steel products provided the Commission with financial data relative to their overall stainless steel operations. These producers together accounted for 92 percent of U.S. producers' shipments of stainless steel products in 1982. These data are presented in table 27.

Aggregate net sales for overall stainless steel operations fell from $2.6 billion in 1979 to $2.3 billion in 1980, and then rose to $2.5 billion in 1981. Net sales dropped by 27 percent to $1.8 billion in 1982 compared with sales in 1981 and by 11 percent from sales of $2.0 billion in 1978.

Aggregate operating profit increased from $180 million in 1978 to $278 million in 1979, or by 54 percent, and dropped sharply thereafter to $147 million in 1980 and $97 million in 1981. The stainless steel industry reported an aggregate operating loss of $53 million in 1982. The ratio of operating profit to net sales paralleled the trend in dollar profits by increasing from 9.0 percent in 1978 to 10.9 percent in 1979 and then declining to 6.3 percent in 1980 and 4.0 percent in 1981. The operating profit ratio turned into a negative 3.0 percent of net sales in 1982. The number of firms reporting operating losses during 1978-81 fluctuated from one in 1979 to five in 1981. In 1982, 10 of 14 reporting firms sustained operating losses on their overall stainless steel operations.

Stainless steel sheet and strip.--Financial data on stainless steel sheet and strip were received from 10 producers together accounting for about 85 percent of U.S. producers' shipments in 1982. These data are presented in table 28.

Net sales of stainless steel sheet and strip increased by 27 percent from $1.1 billion in 1978 to $1.4 billion in 1979, before dropping to $1.2 billion in 1980. Such sales amounted to $1.3 billion in 1981 and then dropped by 26 percent to $966 million in 1982.

Operating profit increased by 60 percent from $108 million, or 9.8 percent of net sales, in 1978 to $173 million, or 12.4 percent of net sales, in 1979. Operating profit then fell sharply to $17 million, or 1.3 percent of net sales, in 1981, or by 84 percent compared with operating profit in 1978. Ten U.S. producers reported an aggregate operating loss of $14 million, or 1.4 percent of net sales, in 1982. One firm sustained operating and net losses in 1978 and 1979, three firms sustained such losses in 1980, four firms, in 1981, and five firms, in 1982.

Stainless steel plate.--Financial data on stainless steel plate operations were received from nine producers, together accounting for about 97 percent of U.S. producers' shipments in 1982. These data are presented in table 29.

Net sales of stainless steel plate increased by 54 percent, from $212.0 million in 1978 to $326.2 million in 1981. Most of the increase in net sales occurred in 1979. In 1982, net sales dropped by 32 percent to $223.5 million compared with net sales in 1981.

Operating profit increased from $13.8 million, or 6.5 percent of net sales, in 1978 to $24.7 million, or 8.2 percent of net sales, in 1979. Thereafter, operating profit declined despite a nominal increase in net sales, dropping to $15.1 million in 1981 and then turning into an operating loss of $12.5 million in 1982. The ratio of operating profit or loss to net sales fell from a posititve 8.2 percent in 1979 to a negative 5.6 percent in 1982. Gross profit margins and net profit-and-loss margins before income taxes followed the same trend as did the operating profit margins. Five firms sustained operating losses in 1982 compared with two firms in 1981 and one firm in 1978 and 1980.

Stainless steel bar.--Financial data on stainless steel bar were received from 8 producers, together accounting for about 92 percent of U.S. producers' shipments in 1982. These data are presented in table 30.

Net sales of stainless steel bar increased from $376.7 million in 1978 to $519.4 million in 1980, or by 38 percent. The majority of the increase in net sales was reported in 1979. Net sales declined to $494.9 million in 1981, or by 5 percent, and further dropped sharply to $365.5 million in 1982, or by 30 percent compared with net sales of 1980. Net sales of 1982 showed a decline of 3 percent from 1978 net sales.

Operating profit increased faster than net sales, from $34.2 million in 1978 to $54.3 million in 1980, or by 59 percent. In the same period, the ratio of operating profit to net sales rose from 9.1 to 10.5 percent. In 1981, operating profit dropped by 16 percent, faster than net sales, to $45.4 million, or 9.2 percent of net sales, from the 1980 level. Eight firms reported an aggregate operating loss of $15.9 million, or 4.4 percent of net sales, in 1982. Six firms reported operating losses in 1982 compared with three firms in 1978-81 and one firm in 1979.

* * * * * * *

Stainless steel wire rod.--Financial data on stainless steel wire rod operations were received from four producers, together accounting for about 91 percent of U.S. producers' shipments in 1982. These data are presented in table 31. Cyclops reported two quarters of operations in 1979, after which it discontinued wire rod operations.

Net sales of stainless steel wire rod increased by 40 percent, from $53.2 million in 1978 to $74.4 million in 1979, and thereafter declined by 7 percent to $69.6 million in 1980, by 10 percent to $62.8 million in 1981, and 31 percent to $43.4 million in 1982.

Operating profit increased significantly to $4.8 million, or 6.4 percent of net sales, in 1979 from an operating loss of $122,000, or 0.2 percent of net sales, in 1978 and then declined sharply by 87 percent to $605,000, or 0.9 percent of net sales, in 1980. Reporting firms sustained an aggregate operating loss of $1.2 million, or 2.0 percent of net sales, in 1981 and such losses increased almost sevenfold to $8.4 million, or 19.4 percent of net sales, in 1982. Gross profit margins and net profit or loss margins before income taxes followed the same trend as did the operating profit margins. Four firms reported operating losses in 1982 compared with three firms in 1978, 1980, and 1981, and two firms, in 1979.

Alloy tool steel.--Financial data on alloy tool steel operations were received from 15 producers, together accounting for about 87 percent of U.S. producers' shipments in 1982. These data are presented in table 32. Two firms * * * did not start production of alloy tool steel until 1980. Therefore, data for 1978-79 are for only 13 producers.

Net sales of alloy tool steel increased by 21 percent from $334.0 million in 1978 to $403.5 million in 1979. Net sales declined each year thereafter and amounted to $231.5 million in 1982, or by 31 and 43 percent compared with net sales in 1978 and 1979, respectively.

Operating profit increased from $32.5 million, or 9.7 percent of net sales, in 1978 to $45.5 million, or 11.3 percent of net sales, in 1979, or by 40 percent. Such profits fell to $33.5 million or 9.3 percent of net sales in 1981, a 26 percent decline from 1979 profit level. The alloy tool steel industry sustained an aggregate operating loss of $16.4 million, or 7.1 percent of net sales in 1982. Pre-tax net profit margins followed the same trend as operating profit margins. Eleven firms out of 15 firms sustained operating losses in 1982 as compared with 5 firms in 1981, 3 firms in 1978 and 1980, and 1 firm in 1979.

Summary of operating profit or loss data

The ratios of operating profit or loss to net sales computed from the data reported in questionnaires by U.S. producers on their overall operations of all stainless steel, alloy tool steel, and operations specifically on the four stainless steel products subject to this investigation are summarized in table 33. For comparison, data are also presented for the comparable profitability ratios compiled by the Federal Trade Commission for all manufacturing companies and for all durable goods producers.

The data show that profitability in the overall stainless steel industry was higher in 1978 and 1979, about the same in 1980, and lower in 1981 and 1982 compared with the return on sales in all manufacturing companies or all durable goods producers; in the alloy tool steel industry, profitability was higher during 1978-81 and lower only in 1982.

In comparison with the operating profit margin of overall corporate operations and overall steel operations of U.S. steel (carbon and speciality) producers, the profitability of the overall stainless steel industry was higher during 1978-80 and about the same in 1981; profitability for the alloy tool steel industry was higher during 1978-81. Overall stainless steel and alloy tool steel operations were relatively profitable in 1979. Thereafter, return on sales dropped during 1980-81 and turned into operating losses in 1982. Operations for all stainless steel products subject to this investigation followed a similar trend in profitability except for stainless steel bar operations, which reflected an increase in profit margins in 1980.

Impact of volume, price, and costs of production on gross profit

An analysis of the decline in the gross profit of the stainless steel and alloy tool steel industry between 1981 and 1982 is presented in table 34. The data presented in this table represent an analysis of the variation in gross profit. Each factor affecting gross profit--changes in volume, price, and cost of production--was viewed in isolation from the other factors and its

impact on the change in gross profit calculated. Volume variance was computed by measuring the change in volume between 1981 and 1982, while assuming that average gross profit remained at the 1981 level. Price and cost of production variances were calculated by measuring the 1981-82 change in those factors while assuming that the volume remained at the 1981 level. The assumptions used to compute these variances were necessary to single out causes for change. To complete the computation, the combined variance due to the interaction of all three factors was calculated by measuring the change in volume times the change in gross profit.

Out of the total decline of $133.8 million in the gross profit of total stainless steel, $49.9 million can be attributed to the drop in sales volume of 219,300 short tons for the stainless steel products subject to this investigation. Declining prices accounted for $98.9 million of the drop, and $12.8 million can be attributed to the increasing cost of production. Interaction of all three factors (volume, price, and cost) contributed a $42.9 million increase in gross profit.

As shown in the following tabulation, the impact of declining prices seems to be the major factor causing the decline in stainless steel sheet and strip, plate, and wire rod's gross profit. Stainless steel bars' average selling price per short ton increased between 1981 and 1982, which contributed to an increase in gross profit for bars, but the cost of production increased much faster than sales price, causing the major decline in its gross profit. The decline in cost of production due to the drop of shipments in plate and stainless steel sheet and strip contributed to the increase in gross profit.

Stainless steel and alloy tool steel: Decrease or (increase) in gross profit between 1981 and 1982 due to volume, price, and cost of production changes

Item	Volume		Price		Cost of Production		Total	
	Gross profit	Percentage relationship	Gross profit	Percentage relationship	Gross profit	Percentage relationship	Gross profit	Percentage relationship
	Million dollars	Percent	Million dollars	Percent	Million dollars	Percent	Million dollars	percent
Stainless steel:								
Sheet and strip	15.0	39.8	67.3	178.5	(44.6)	(118.3)	37.7	100.0
Plates	6.3	22.8	31.6	114.5	(10.3)	(37.3)	27.6	100.0
Bars	22.8	37.2	(17.3)	(28.2)	55.8	91.0	61.3	100.0
Wire rod	.7	9.7	6.3	87.5	.2	2.8	7.2	100.0
Alloy tool steel	19.6	34.0	19.7	34.2	18.3	31.8	57.6	100.0

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

In comparison with stainless steel, the declines in shipments of alloy tool steel between 1981 and 1982 were larger. Alloy tool steel profit margins were also much higher. As a result, alloy tool steel volume declines had a slightly greater impact than in stainless steel. Conversely, although the decline in the average selling price of alloy tool steel was slightly greater than that for stainless steel, shipments of stainless steel were more than fourteen times larger. Thus a smaller change in price had a much greater effect on stainless steel gross profit. The increase in production costs for alloy tool steel was generally greater than that for stainless steel products (except bar), resulting in a greater impact on gross profit.

Capital expenditures and research and development

All stainless steel products.—Eleven domestic producers' capital expenditures in connection with their stainless steel operations are presented in the following tabulation (in thousands of dollars):

	Capital expenditures
1978	54,051
1979	71,681
1980	83,688
1981	135,400
1982	88,065

Total capital expenditures increased from $54.1 million in 1978 to $135.4 million in 1981, and then dropped to $88.1 million in 1982. Reported total capital expenditures include *** million expended by * * * in 1981 and * * * in 1982, and about *** million spent by * * * in 1981 * * *.

Stainless steel sheet and strip.--Seven domestic producers' capital expenditures and research and development expenses in connection with their stainless steel sheet and strip operations are presented in the following tabulation (in thousands of dollars):

	Capital expenditures	Research and development expenses
1978	20,490	3,850
1979	18,018	4,231
1980	28,420	5,174
1981	68,501	5,690
1982	18,063	4,598

Total capital expenditures increased from $20.5 million in 1978 to $68.5 million in 1981 and then fell to $18.1 million in 1982. The large increase in total capital expenditures in 1981 reflects * * *. Research and development expenditures increased steadily from $3.9 million in 1978 to $5.7 million in 1981 and then dropped to $4.6 million in 1982.

Stainless steel plate.--Five domestic producers' capital expenditures and four producers' research and development expenses relative to their stainless steel plate operations are presented in the following tabulation (in thousands of dollars):

	Capital expenditures	Research and development expenses
1978	2,256	196
1979	3,102	268
1980	4,411	450
1981	5,315	651
1982	3,594	506

Total capital expenditures increased steadily from $2.3 million in 1978 to $5.3 million in 1981 and then fell to $3.6 million in 1982. Total reported research and development expenditures increased from $196,000 in 1978 to $651,000 in 1981 but then declined to $506,000 in 1982.

Stainless steel bar.--Four domestic producers' capital expenditures and seven producers' research and development expenses relative to their stainless steel bar operations are presented in the following tabulation (in thousands of dollars):

	Capital expenditures	Research and development expenses
1978	10,636	5,400
1979	15,773	6,880
1980	16,780	7,152
1981	25,844	7,333
1982	32,165	7,935

Total capital expenditures increased from $10.6 million in 1978 to $32.2 million in 1982. In 1981 and 1982, * * * its capital expenditures compared with its 1980 level. * * * incurred * * * percent of total reported capital expenditures. * * * reported *** million for * * *.
Total reported research and development expenditures increased from $5.4 million in 1978 to $7.9 million in 1982.

Stainless steel wire rod.--Two domestic producers' capital expenditures and four producers' research and development expenses relative to their stainless steel wire rod operations are presented in the following tabulation (in thousands of dollars):

	Capital expenditures	Research and development expenses
1978	1,777	848
1979	3,045	1,304
1980	4,498	1,539
1981	5,604	1,567
1982	8,900	2,177

Total capital expenditures increased from $1.8 million in 1978 to $8.9 million in 1982. * * *. Total reported research and development expenditures increased steadily from $848,000 in 1978 to $2.2 million in 1982.

Alloy tool steel.--Ten domestic producers' capital expenditures and 12 producers' research and development expenses in connection with their alloy tool steel operations are presented in the following tabulation (in thousands of dollars):

	Capital expenditures	Research and development expenses
1978	5,778	2,194
1979	8,750	2,344
1980	11,531	2,809
1981	15,017	3,148
1982	13,548	2,744

Total capital expenditures increased from $5.8 million in 1978 to $15.0 million in 1981 and then fell to $13.5 million in 1982. Total reported research and development expenditures increased from $2.2 million in 1978 to $3.1 million in 1981 but then declined to $2.7 million in 1982.

Investment in productive facilities

Seventeen U.S. producers provided data relative to their investment in productive facilities employed in the production of all stainless and alloy tool steel products. Some of the producers also provided such data on their individual product lines. These data are presented in table 35.

Investment in stainless steel facilities, valued at original cost, increased from $987.7 million in 1978 to $1.3 billion in 1982, or by 32 percent. The book value of these facilities increased by $195 million during this period. Alloy tool steel investment increased from $83.9 million in 1978 to $106.2 million in 1982, valued at original cost. The book value increased $13.5 million from 1978 to 1982.

To provide an additional measure of profitability, the ratios of operating profit or loss to original cost and book value of fixed assets are also presented in table 35. These ratios for both stainless steel and alloy

tool steel followed the same trend as did the ratios of operating profit or loss to net sales, increasing in 1979, declining in 1980 and 1981, and turning negative in 1982. Such ratios for all products subject to this investigation followed a similar trend as did the ratios of operating profit or loss to net sales for the respective products. Original-cost and book-value calculations are somewhat distorted by the time period during which the investments were made.

The Question of Imports as a Substantial Cause of Serious Injury or the Threat Thereof

Market penetration

As shown in tables 5 to 11, imports have taken an increasing share of the U.S. market for stainless steel and alloy tool steel following the removal of import restraints in February 1980. The following tabulation shows import penetration ratios by product (in percent):

Item	1978	1979	1980	1981	1982
Stainless steel:					
Sheets and strip	9.9	7.0	5.8	9.1	13.4
Plate	9.2	5.0	2.7	6.7	12.3
Bar	17.2	16.3	21.5	22.3	30.1
Wire rod	40.0	30.5	38.6	45.5	50.0
Total	12.0	9.3	10.0	12.5	16.5
Alloy tool steel	22.3	27.0	28.3	36.4	48.2
Average	12.9	10.8	11.8	14.4	19.9

As U.S. producers' shipments of stainless steel declined 22 percent from 1981 to 1982, imports increased their share of the market from 12.5 to 17.3 percent. Imports of alloy tool steel took an even larger share of tool steel consumption, increasing from 36.4 percent in 1981 to 48.2 percent in 1982. U.S. producers' shipments of tool steel fell almost 50 percent during this period.

Prices

U.S. producers of specialty steel publish list prices on an f.o.b. basis, with base prices determined in large part by the alloy content of the steel. Extra charges are added to the base price for orders below a minimum weight, for special packaging, and for the type of surface finish. For stainless steel flat products (sheet, strip, and plate) there are extra charges for nonstandard widths and for special edging.

Price trends of U.S.-produced and imported specialty steel varied in 1980-82 by product lines and by countries of origin. However, a common trend was a general price decline that began in the second half of 1981 and continued into 1982. U.S. producers' prices for stainless steel products ranged from $1,580 to $3,346 per short ton in 1982, and for tool steel, from $3,210 to $8,269 per short ton. Imported specialty steel was generally lower priced than that produced domestically, by from 1 to 29 percent in 1982. Following are summaries of recent price trends and domestic/import price comparisons by product groupings.

Stainless steel sheet and strip.--The average price of U.S.-produced stainless steel sheet and strip declined 7 percent in 1980, from $1,891 per ton in January-March 1980 to $1,755 per ton in October-December 1980 (table 36). This price decline was concurrent with production declines in user industries (fig. 2). 1/ The only specification for which the Commission collected price information for which prices did not decline in this period was 60-inch wide grade 304 sheet. This item is manufactured by only one U.S. producer (table 37). Prices increased during January-September 1981 as business activity strengthened and economic forecasts for future growth were optimistic. The average price then declined by 14 percent from July-September 1981 to October-December 1982 concurrent with a 12-percent decline in durable manufactures production.

In contrast to U.S. producers' prices, importers' prices remained relatively strong in 1980, increasing by 6 percent from January-March 1980 to October-December 1980 for the one specification (grade 430 sheet) for which a full price series was available (table 37). 2/ Importers' prices began to decline in April-June 1981 for the 316 and 430 grade sheet specifications and one or two quarters later for the 304 grade sheet specifications. From July-September 1981 to October-December 1982, importers' prices declined an average of 9 percent. This decline varied among specifications; prices of 304 and 316 grades declined by about 11 percent, and prices of the 430 grade declined only 3 percent.

Imported stainless steel sheet was lower priced than the U.S.-produced product for three of the four specifications, by from 1 to 20 percent in 1981 and 1982. The domestic/import price difference for these specifications was generally greatest in October-December 1981, averaging 14 percent. This difference narrowed in 1982 to an average of 3 percent in October-December 1982 as U.S. prices decreased at a faster rate than import prices. For one stainless steel sheet specification (36-inch or 48-inch wide grade 304 sheet) import prices were consistently higher than domestic prices, by an average of 7 percent in 1982.

Stainless steel plate.--In contrast to prices of stainless steel sheet and strip, the average price of U.S.-produced stainless steel plate was relatively steady in 1980 (table 36). This difference may be explained in

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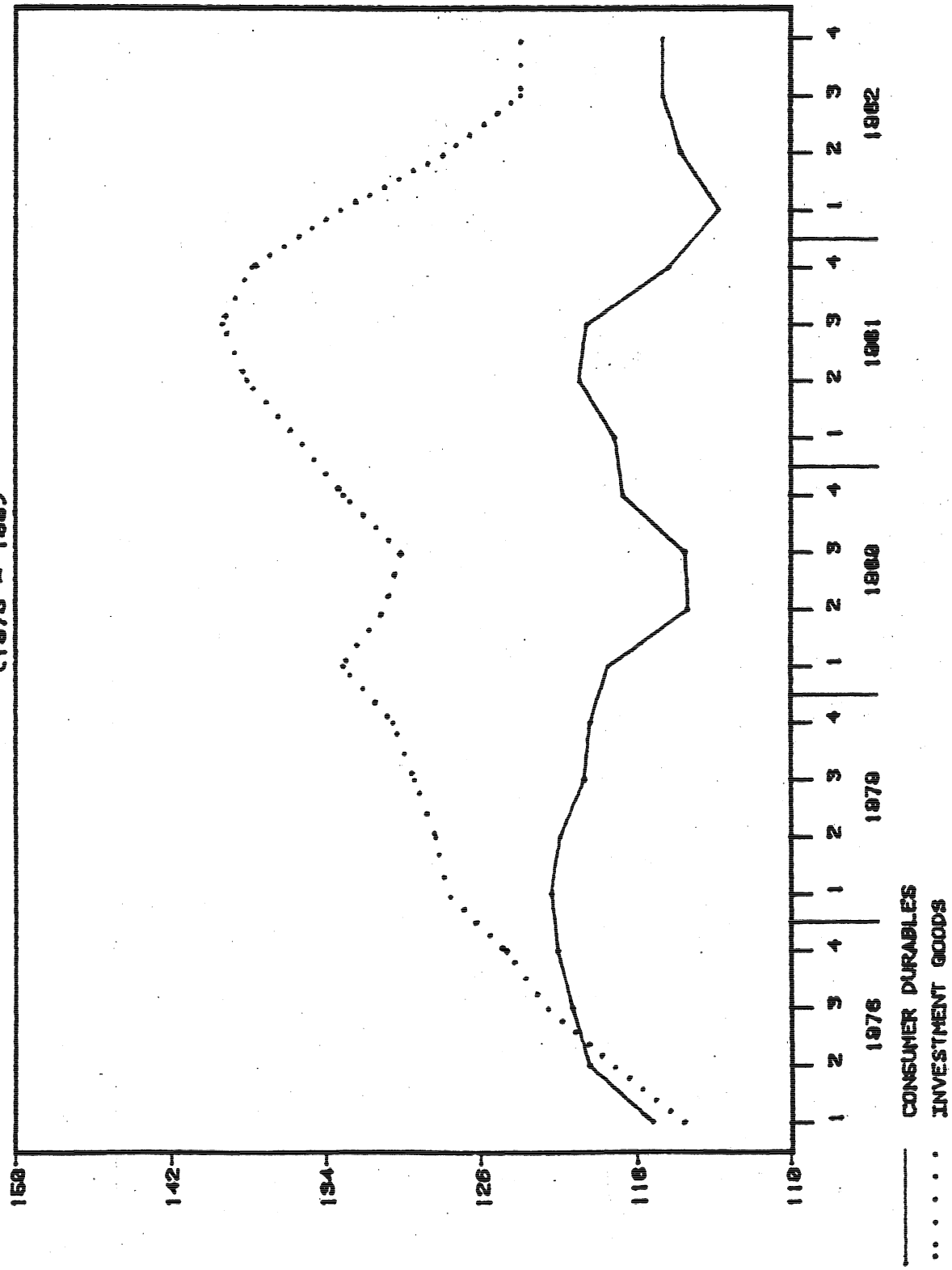
1/ Price changes generally lagged changes in durable manufactures production by one quarter.

2/ Prices were provided by importers of stainless steel sheet and strip from France, West Germany, the United Kingdom, Sweden, and Japan. These countries together accounted for 77 percent of sheet and strip imports in 1982.

FIGURE 2.--INDEX OF CONSUMER DURABLE AND INDEX OF INVESTMENT GOODS PRODUCTION

(1975 = 100)



part by the relatively strong 1980 business activity in the capital goods sector, in which stainless steel plate is primarily used, relative to the consumer durable goods sector (fig. 2). From October-December 1980 to July-September 1981, the U.S. producers' average price of plate increased from $2,152 per ton to $2,346 per ton, or by 9 percent. Prices declined thereafter, by an average of 11 percent from July-September 1981 to October-December 1982, as investment goods production also declined 11 percent.

A continuous series of prices for imported stainless steel plate was available only from October-December 1980 (table 38). 1/ Importers' prices generally remained strong, increasing in some instances, through January-June 1981. Prices began to decline in July-September 1981 for one of the 304 grade plate specifications, and in October-December 1981 for the other 304 specification. Importers' prices for the 316L grade plate specification did not begin to decline until January-March 1982. The average importers' price in 1982 was $60 per ton, or 3 percent below average importers' price in 1981, for all plate specifications combined.

Imported stainless steel plate was generally lower priced than U.S.-produced plate. In 1981, imported plate sold for an average of 14 percent below the domestic price. In 1982, this average price difference narrowed to 7 percent. The price difference was greatest for the 316L grade, averaging 20 percent in 1981 and 11 percent in 1982.

Stainless steel bar.--After increasing from $2,597 per ton in January-March 1980 to $2,787 per ton in the following quarter, the U.S. producers' average stainless steel bar price remained relatively steady through April-June 1981 (table 36). Bar products are generally used in the production of capital goods rather than consumer durables, and the relative strength of bar prices in 1980 and 1981 may be attributed in part to the relative strength of capital goods production during that period (fig. 2). The average price increased to $2,914 per ton in July-September 1981, and declined thereafter to $2,504 per ton in October-December 1982, or 14 percent.

Importers' prices also remained relatively steady in 1980, with prices for one specification (cold-formed, grade 304) decreasing slightly from January-March 1980 to October-December 1980, and prices for another specification (hot-rolled, grade 304) increasing slightly (table 39). 2/ Prices for the two 304 grade bar specifications then declined appreciably throughout 1981 and 1982, from an average of $2,521 per ton in January-March 1981 to $2,038 per ton in October-December 1982, or by 19 percent. Prices for the 303 grade specification, however, increased from January-March 1981 to

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1/ Prices were provided by importers of stainless steel plate from the United Kingdom and Japan. Imports from these countries accounted for 34 percent of stainless steel plate imports in 1982.

2/ Prices were provided by importers of stainless steel bar from Japan, Spain, Sweden, West Germany, and Brazil. Imports from these countries accounted for 72 percent of stainless steel bar imports in 1982.

January-March 1982 before declining from $2,524 perton in January-March 1982 to $2,182 per ton in October-December 1982, or by 14 percent.

In 1980, imports were generally higher priced than U.S.-produced stainless steel bar, but were lower priced in 1981 and 1982. On average, prices of imported bar were 14 percent lower than those of the U.S. product in 1981. In 1982, the average difference was 17 percent, as import prices declined at a faster rate than did U.S. producers' prices.

Stainless steel wire rod.--After increasing by 6 percent from January-March 1980 to April-June 1980, U.S. producers' prices for stainless steel wire rod decreased steadily from $2,287 per ton in April June 1980 to $1,754 per ton in October-December 1982, or by 23 percent (table 36).

Importers' prices increased 6 percent from January-March 1980 to October-December 1981 (table 40). 1/ Importers' prices generally declined thereafter to $1,655 per ton in October-December 1982, or 21 percent lower than their October-December 1981 level.

Importers' prices of wire rod were consistently lower than U.S. producers' prices. In 1980, import prices were an average of 8 percent lower than U.S. producers' prices. In 1981, this difference was 7 percent, and in 1982, 8 percent; U.S. producers' and importers' prices declined at about the same rate over the period.

Tool steel.--The average price of U.S.-produced tool steel bar increased from $5,455 per ton in January-March 1980 to $5,874 per ton in April-June 1981, or by 8 percent (table 36). Prices for the high-speed and hot-work specifications generally declined thereafter, from an average of $6,088 per ton in January-March 1981 to $5,407 per ton in October-December 1982, or by 11 percent (table 41). Prices of cold-work tool steel bar increased throughout 1981 and remained relatively strong in 1982 when compared with average 1981 prices. However, cold-work prices did decline from a high of $5,499 per ton in April-June 1982 to $5,004 per ton in October-December 1982, or by 9 percent.

Importers' prices showed different trends for each specification. 2/ High-speed tool steel import prices generally increased through January-March 1981 and declined thereafter from $8,480 per ton in January-March 1981 to $7,613 per ton in October-December 1982, or by 10 percent (table 41). Hot-work tool steel import prices remained relatively strong in 1981 but begin to decline in 1982, from $3,345 per ton in October-December 1981 to $2,973 per ton in October-December 1982, or by 11 percent. Cold-work tool steel import prices remained relatively strong throughout the period, similar to price trends of U.S.-produced cold-work tool steel.

1/ Prices were provided by importers of stainless steel wire rod from Japan, Brazil, Spain, Sweden, and Italy. Imports from these countries accounted for 64 percent of wire rod imports in 1982.

2/ Prices were provided by importers of tool steel from West Germany, Brazil, Sweden, and Austria. Imports of this product from these countries accounted for 70 percent of tool steel imports in 1982.

Imported tool steel was generally lower priced than the domestic product by an average of 8 percent in 1981 and 13 percent in 1982. The import/domestic price difference was greatest for the cold-work specification, averaging 24 percent in 1982. However, U.S. producers' cold-work prices in any one quarter differed significantly between individual firms, and prices of this product from foreign sources often fell within the range of U.S. producers' prices, although at the lower end of that range.

Other Factors Affecting Supply and Demand in the U.S. Market

Consumption declines

Apparent U.S. consumption of specialty steel is cyclical, as shown by annual consumption data for 1964-82 (fig. 3). 1/ In the early years of that period, apparent U.S. consumption twice increased for 2 years before sharply declining during a single year; from 1970 to 1980, two 5-year cycles occurred. The first of these cycles was a period of 14-percent annual average growth from 1971 to 1974, followed by a 40-percent decline in consumption in 1975; the second, from 1976 to 1979, was also a period of 14-percent annual average growth, followed by a decline of 21 percent in 1980. This latter cycle preceded a 1-year recovery in 1981 of only 11 percent, and a further decline in apparent consumption in 1982 to a level 17 percent below consumption in 1981 and 27 percent below the 1979 peak.

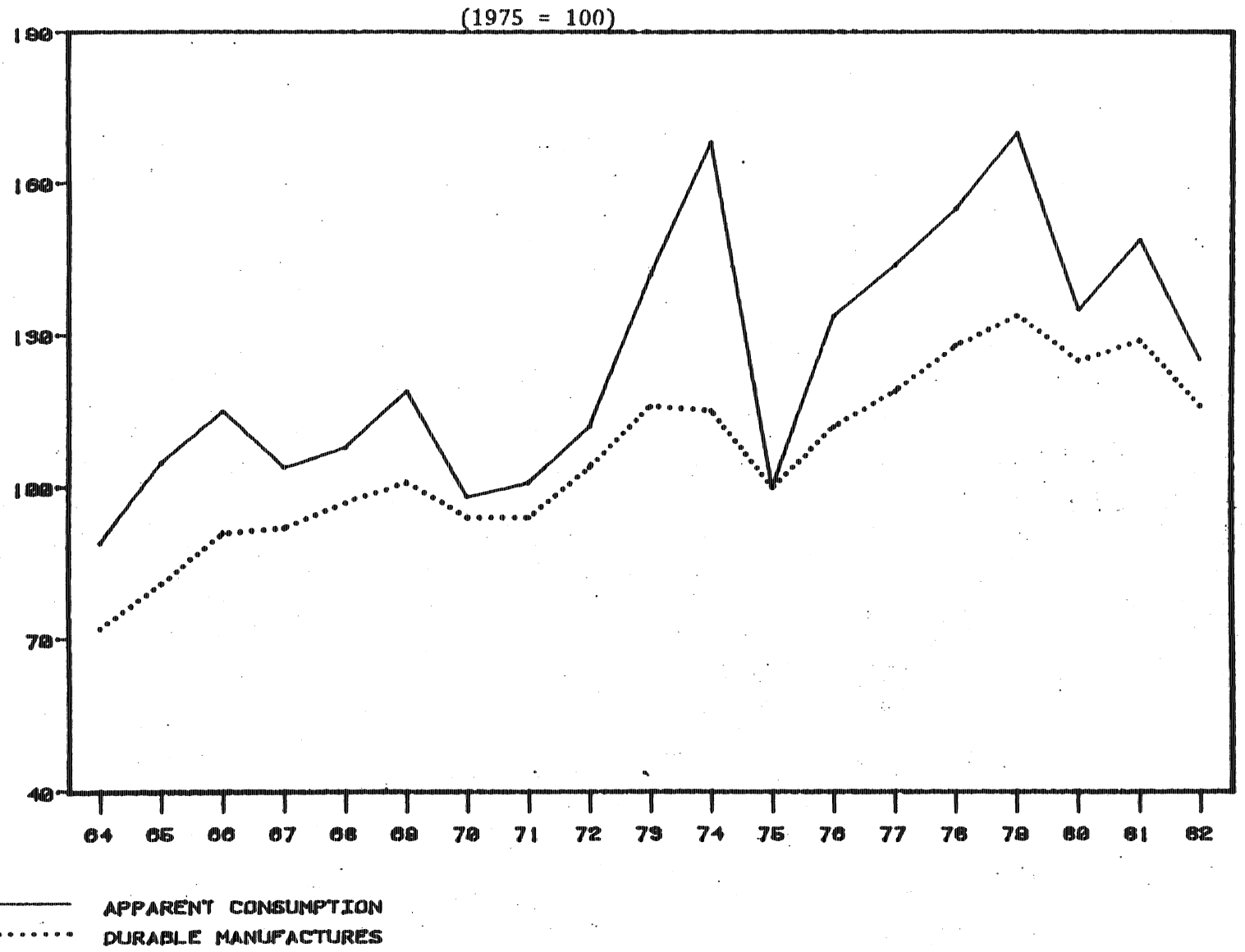
The decline in apparent consumption in 1982 was unusual in that it was separated from the 1980 recession by only 1 year of growth. Although the 17-percent decline in apparent consumption in 1982 was less than the 40-percent decline that occurred in 1975, it is also measured against a lower base year (1981). 2/ In contrast, the 1975 decline is measured against a base year (1974) when apparent consumption of specialty steel was exceptionally high. This high level of consumption in 1974 was common to other steel products as well as specialty steels, and was partly the result of unprecedented inventory buildup which, subsequently in 1975, had to be liquidated before orders were resumed.

The 1975 recession differed from the 1982 downturn in two other important respects. First, specialty steel prices increased significantly in 1975 over 1974 levels, thus offsetting some of the revenue effect of a decrease in apparent consumption and U.S. shipments. Net sales revenue of specialty steel decreased only 17 percent from 1974 to 1975 despite a 52-percent decline in U.S. producers' shipments. In contrast, specialty steel prices in the 1982 downturn were generally below 1980 and 1981

1/ Demand for specialty steel is derived from its use in manufacturing industries. Durable manufactures production appears to be a good measure of business activity in user industries of specialty steel (fig. 3). A correlation of .88 existed between apparent consumption of specialty steel and durable manufactures production from 1964 to 1982.

2/ Apparent consumption in 1982 was 27 percent below the 1979 peak.

FIGURE 3.--INDEXES OF U.S. APPARENT CONSUMPTION OF SPECIALTY STEEL, AND DURABLE MANUFACTURES PRODUCTION, 1964-82



price levels, causing the dollar value of net sales to decrease by 28 percent from 1981 to 1982 as U.S. producers' shipments declined by 23 percent.

A second distinction between the two major downturns is the role played by interest rates. Lower real interest rates prevailed in 1974 and 1975 than in 1981 and 1982. The prime rate in 1975, for example, was about 8 percent, and inflation for that year was about 9.5 percent. 1/ In contrast, the prime rate in 1982 was an average of 15 percent, as inflation declined to about 3 percent from the record highs in preceding years. The real rate of interests were about -1.5 percent in 1975 and 12 percent in 1982. It is likely that U.S. producers' profit margins were adversely affected by higher interest costs to a greater extent in 1982 than in 1975.

Product substitution

The issue of a decline in U.S. producers' shipments as a result of competition from substitute products is primarily relevant for stainless steel sheet and strip. When these products are used for decorative or aesthetic purposes, or when the technical characteristics of the metal are not crucial, substitution by other products is often feasible. In contrast, most stainless steel bar, wire rod, and plate, and tool steels are used for applications which depend on the technical properties of the metal; substitution by other products is generally not feasible in these cases. 2/

It is unlikely that a significant portion of the 1982 decline in stainless steel shipments was the result of product substitution. The significant decline in production in user industries clearly overshadowed any substitution effect that may have occurred in 1982. In addition, substitution by plastics or other synthetic materials would tend to be a more gradual process and would appear as a long-term decline in U.S. apparent consumption. 3/ Such a decline, however, would most likely be partially offset by the appearance of new uses for stainless steel.

Figure 4 shows apparent U.S. consumption from 1964 to 1982, and trend lines for the 1964-82 and 1972-82 periods. The trend in consumption for the 1964-82 period displays a steeper slope than for the 1972-82 period, showing

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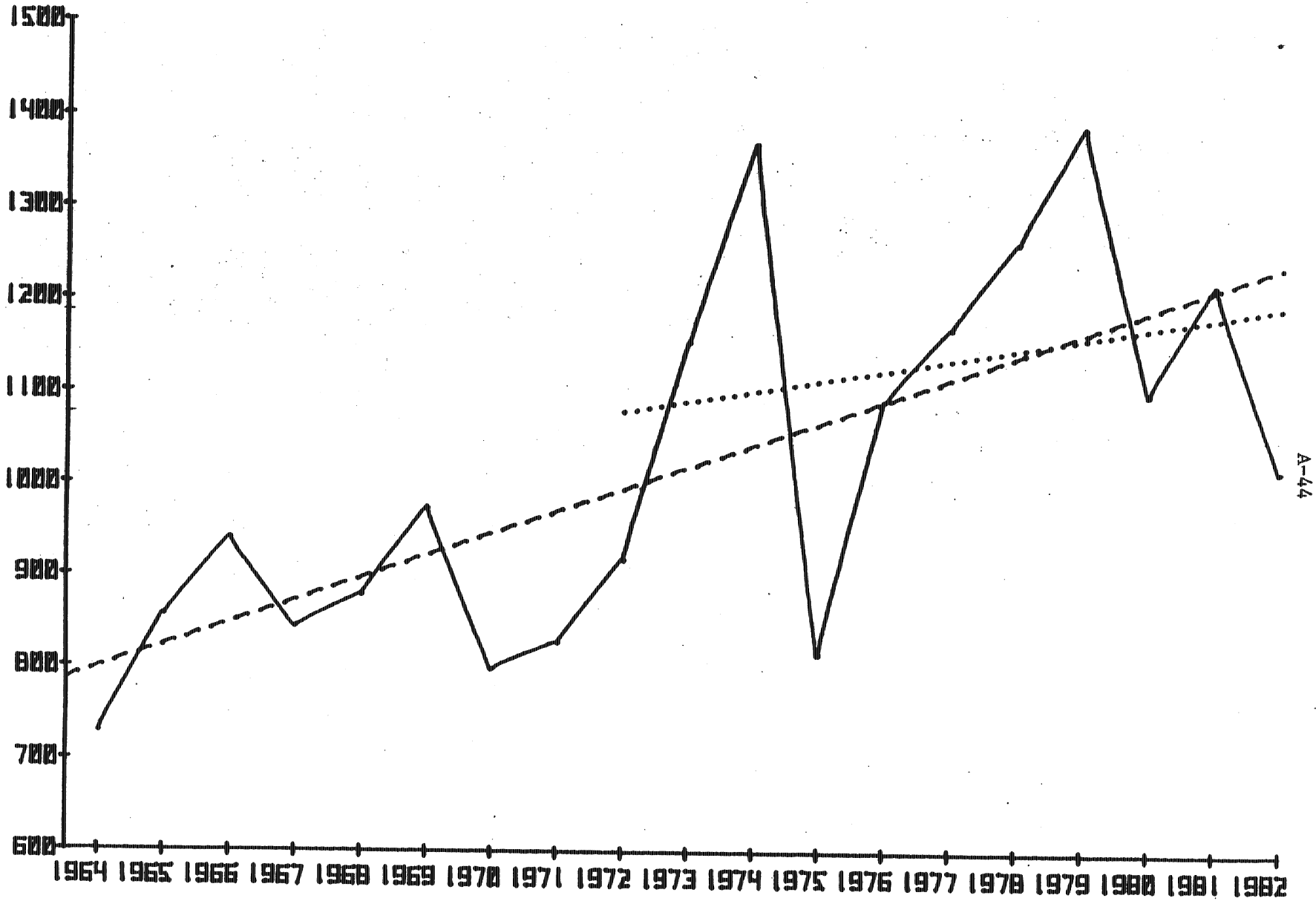
1/ The annual prime rate of interest is from the U.S. Federal Reserve Board, Federal Reserve Bulletin. The inflation rate is measured by the increase in the Wholesale Price Index from the previous year, as published by the International Monetary Fund in International Financial Statistics.

2/ The Organization for Economic Cooperation and Development's Report on the Stainless Steel Industry, Paris, 1982 stated" for most [industrial] applications for which stainless steels are used, the technical requirements are such that competition from other materials is rather limited."

3/ Organization for Economic Cooperation and Development, "The present trends in substitution between stainless steel and other materials will probably continue, no drastic changes being expected. This implies that in many traditional applications of stainless steels, there will be some gradual replacement by other materials, especially plastics, the motives for these substitutions often being weight and cost saving OECD.

Figure 4.--U.S. apparent consumption of specialty steel, by year, 1964-82, and trend lines for 1964-82 and 1972-82.



that the overall growth of apparent U.S. consumption of specialty steel has slowed during the most recent 10 years. The growth rate, however, remains positive, showing average annual growth of about 1 percent.

Increased costs of production

The cost of labor per ton of steel produced is a major component in the cost of producing specialty steel. 1/ From 1981 to 1982, the rate of increase of unit labor costs declined for stainless steel sheet and plate (table 42). Over the same period, there occurred an increase in the rate of growth of unit labor costs for stainless steel sheet and strip, bar, wire rod, and for tool steel.

Changes in costs of raw material and energy are indicated by the producer price indexes (table 43). Price indexes of stainless steel scrap and nickel scrap declined in 1982 by 20 and 23 percent, respectively. The price index for chrome charge did not change over the same period. Fuel and power prices also remained stable from 1981 to 1982; while coal prices increased by 8 percent.

Exchange rates

Exchange-rate changes can affect the relative dollar price of foreign to U.S.-produced specialty steel, in turn affecting the level of U.S. imports or exports of this product. An appreciation of the dollar generally lowers the dollar price of U.S. imports and increases the foreign-currency price of U.S. exports, encouraging imports and discouraging exports. A depreciation of the dollar generally has the opposite effect.

Since 1978, in both nominal and real terms, the dollar has gone through two cycles: a depreciation which lasted through the end of 1980, and a relatively steady appreciation thereafter, which peaked in October-December 1982 (tables 44 and 45, and figs. 5 and 6). The magnitude of the recent dollar appreciation varied against different foreign currencies. For example, with respect to the major foreign suppliers of specialty steel to the United States market, the dollar appreciation was greater against European currencies than the Japanese yen.

The domestic specialty steel industry has claimed that the recent appreciation of the dollar has had no effect on the price competitiveness of foreign specialty steel in the U.S. market. 2/ This conclusion is reached because many foreign producers import much of the raw material and energy

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1/ This section will deal only with changes in unit variable costs. Increases in unit fixed costs are a function of decreases in production and are related more to the decline in apparent consumption and shipments.

2/ Posthearing brief on behalf of the Specialty Steel Industry of the United States and United Steelworkers of America, pp. 19 and 20.

FIGURE 5.--FOREIGN CURRENCY PER U.S. DOLLAR NOMINAL EXCHANGE RATES FOR MAJOR FOREIGN SUPPLIERS OF SPECIALTY STEEL, AND THE U.S. EFFECTIVE EXCHANGE RATE, BY QUARTER, 1978-82

(Jan.-Mar. 1978 = 100)

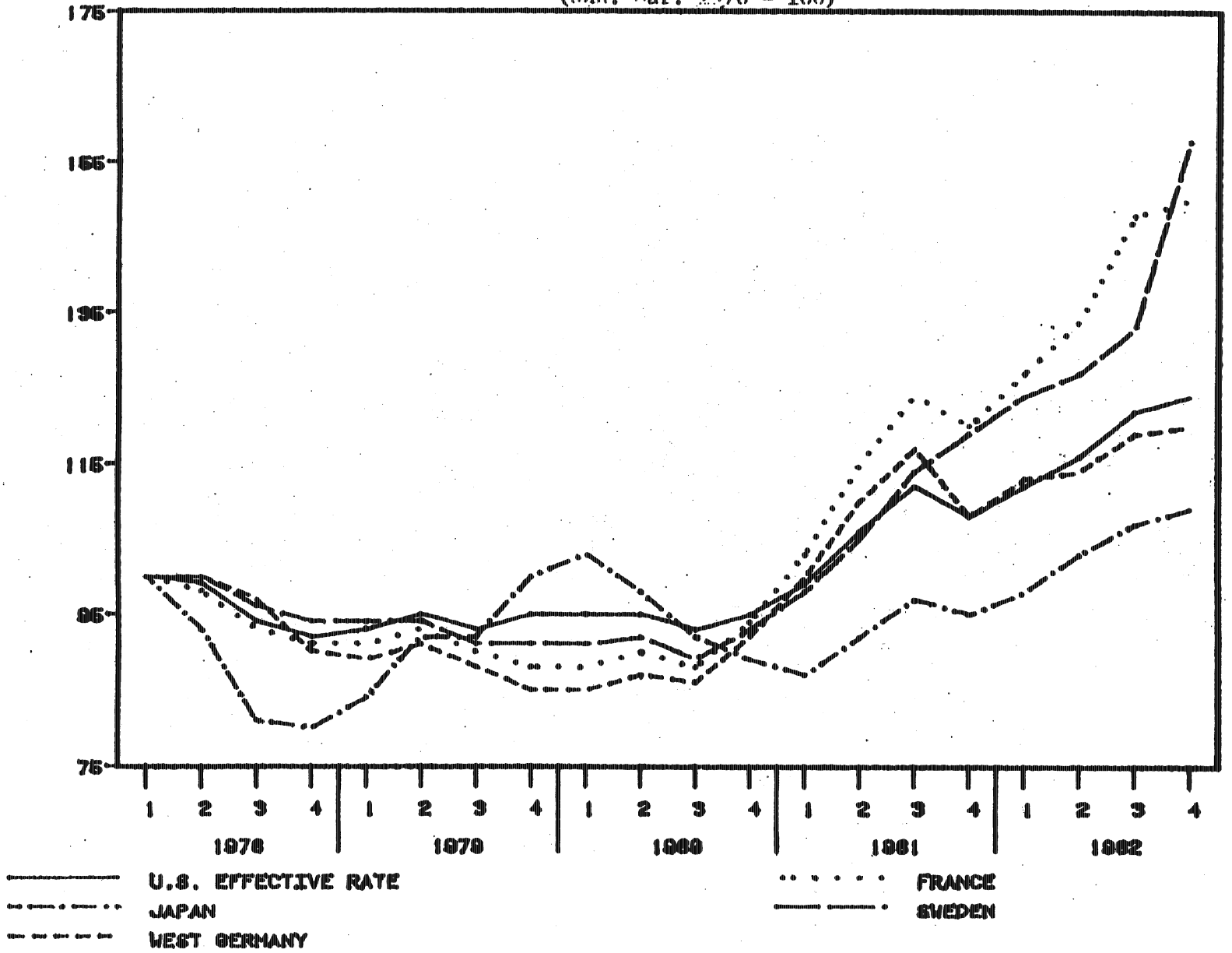
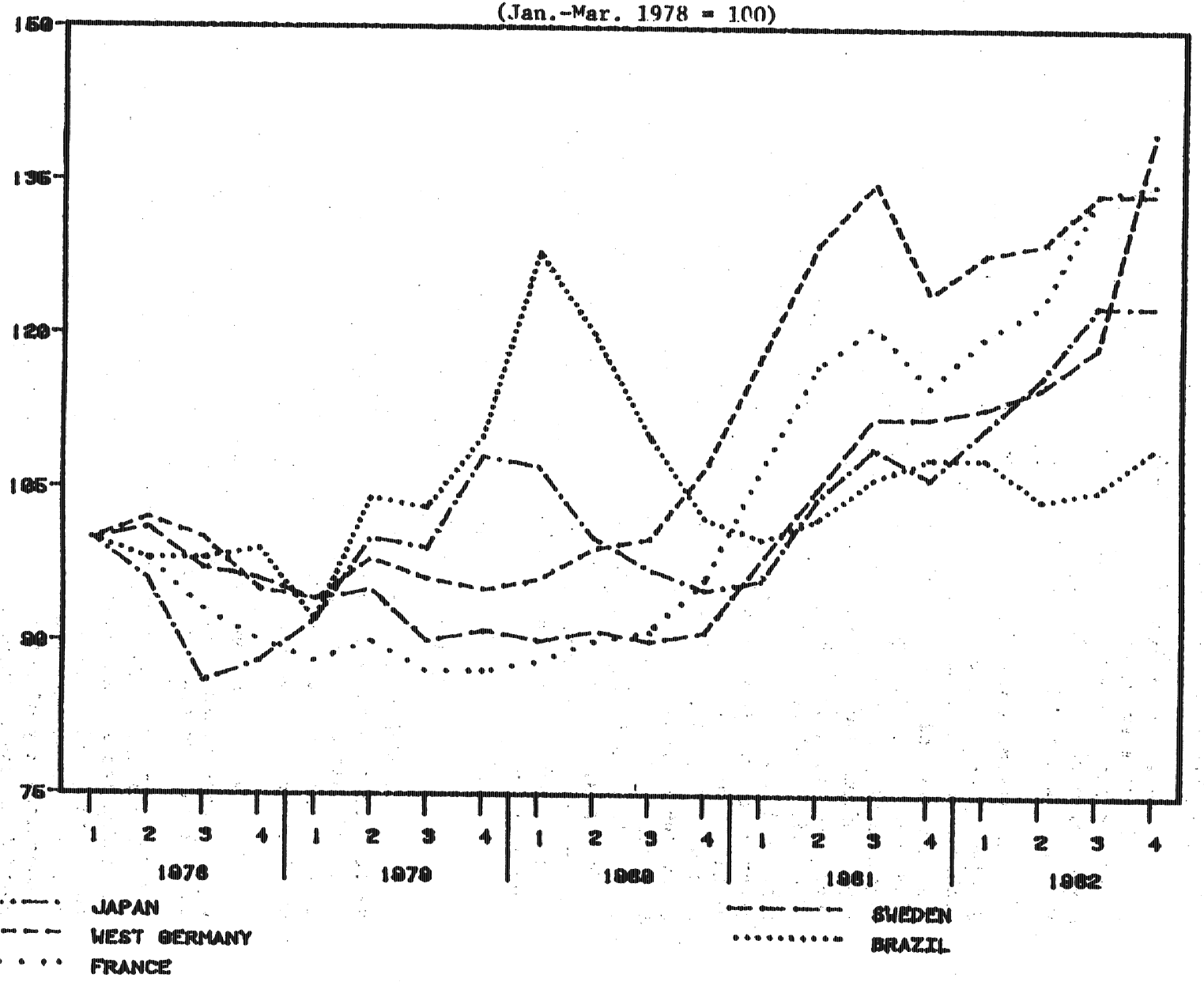


FIGURE 6.--FOREIGN CURRENCY PER U.S. DOLLAR REAL EXCHANGE RATES FOR MAJOR FOREIGN SUPPLIERS OF SPECIALTY STEEL, BY QUARTER 1978-82

(Jan.-Mar. 1978 = 100)



necessary to manufacture specialty steel, and these raw material imports are frequently denominated in dollars. The domestic industry therefore claims that the appreciation of the dollar has increased foreign producers' costs of production, negating any exchange-rate-related competitive benefit gained by foreign producers in the U.S. market.

To the extent that foreign producers must import dollar-denominated raw materials or energy, an appreciation of the dollar will increase their costs of production. However, because only a portion of foreign producers' costs are denominated in dollars, it appears that the conclusion reached by the industry is not fully justified. 1/

To determine whether exchange-rate changes have had an influence on U.S. foreign trade in specialty steel, correlations were run between quarterly exchange-rate changes, total U.S. imports and exports of specialty steel, and U.S. imports and exports of specialty steel by product groupings. The results show that for total imports of specialty steel, there is a statistically significant positive correlation between the U.S. effective exchange rate and imports from 1980 to 1982; i.e., an appreciation of the dollar is positively correlated with an increase in imports (table 46). For imports of four of the five individual product lines there is a statistically significant positive correlation with the exchange rate. There is also a statistically significant negative correlation between total U.S. exports of specialty steel and the exchange rate. For exports of three of the five product lines there is a statistically significant negative correlation. Such correlations do not establish a causal link between currency fluctuation and increased imports; however, it is reasonable to assume that an exchange-rate change will have some affect on foreign prices relative to domestic prices, and subsequent trade flows. The fact that statistically significant correlations exist between imports, exports, and the exchange rate suggests that the appreciation of the dollar in 1981 and 1982 did contribute to increased imports of specialty steel.

Producers' Efforts to Compete With Imports

U.S. producers of stainless steel and alloy tool steel products have taken varied steps in recent years in order to more effectively compete with imported specialty steel products. Many of the investment projects undertaken were planned and executed during the period of import relief granted for specialty steel products from June 1976 to February 1980.

The various actions taken by domestic firms can be categorized in three ways: organization/operational changes, technological developments, and capital investments. By far the greatest goal of these actions was to cut

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1/ In the United States specialty steel industry, about 25 percent of costs of production are accounted for by labor costs. In the domestic industry's posthearing brief, it was estimated that about 50 to 60 percent of foreign producers' costs of production are denominated in dollars. Although these proportions may differ for any one foreign supplier, it appears that a large portion of the costs of foreign specialty steel production is denominated in their home currency.

costs; a second general aim was to improve marketing and technical services to customers. Although the individual firms report that the measures undertaken were in response to increasing import competition, it is evident that the actions undertaken have enhanced the competitiveness of domestic firms with each other. Furthermore, most firms have reported increasingly drastic cost-cutting measures in 1981 and 1982--for example, layoffs of wage and salary personnel, short weeks, and pay and benefit cutbacks--which must be considered to be in some measure a response to the general economic recession as well as import competition. Details of the firms' reported efforts to compete with imports are given below.

Organizational/operational changes

Of 25 U.S. producers of specialty steel products responding to Commission questionnaires, 16 provided information on organizational/operational changes they undertook to meet import competition. Four respondents withdrew from unprofitable lines of specialty steel production, and one firm, Crucible Inc., is in the process of selling its entire facility in Midland, Pa., which produces primarily stainless steel flat-rolled products, to Jones & Laughlin Steel Co. In general, these actions accelerate the already-present trend among specialty steel producers to reduce the breadth of the products they offer in favor of concentrating assets in a few product lines in which they have production and marketing advantages.

In addition to these measures, eight firms reported layoffs of salary and/or wage personnel. Other labor-related cost-cutting measures included placing workers on short weeks, cutting employee salaries, wages, and benefits, and renegotiating labor contracts.

The other major actions taken by many of the reporting firms involved more aggressive marketing of specialty steel products and efforts to improve technical assistance to customers. Seven firms reported significant cutting of prices to meet import competition and retain customers.

Technological changes

The U.S. specialty steel industry is generally acknowledged to be technologically up to date and efficient. Effectively all U.S.-made specialty steel is produced by the more efficient AOD process, and about 75 percent of U.S.-made specialty steel is continously cast, 1/ in contrast to only 30 percent for the U.S. carbon steel industry.

Four firms reported specific technological developments undertaken to meet import competition. All four firms reported the development of new alloys of specialty steel products which are alleged to provide enchanced performance characteristics and which would serve specialty markets where

1/ The 75 percent of U.S. specialty steel that is continuously cast may be close to the optimum that can be manufactured by this method. Because of metallurgical constraints, tool steel and some stainless steel series 400 products can normally not be cast by the continuous method.

there is currently less import competition. One firm, Universal-Cyclops, reported the development of a new melting-refining process utilizing powder metallurgy, which is capable of producing purer steel with greater alloy content and more complex alloy configuration.

Conversely, several firms reported curtailed research and development efforts allegedly due to low profitability caused by import competition.

Capital investment

Ten U.S. producers of specialty steel reported specific capital investment projects, primarily aimed at cutting costs, undertaken to compete with imports. Only two firms undertook projects which would result in significant increases in production capacity; another firm stated that it has delayed an investment project which would significantly increase its capacity because of import competition.

Major investment projects aimed at cutting costs and increasing efficiency include investments in additional AOD and continuous casting equipment. Other efforts include investments to decrease energy costs and cutting raw material and labor costs through computerization of melting and rolling processes. The capital expenditures of U.S. specialty steel producers in the period under investigation are presented in another section of this report.

Conversely, 14 U.S. producers of specialty steel products stated they were forced to curtail, "stretch-out", or abandon capital investment projects because of low profitability and uncertain return on investment, due to competition from imports.

Actions to Be Undertaken by Producers Should Import Relief Be Granted

In their responses to Commission questionnaires, U.S. producers of stainless steel and alloy tool steel products were requested to provide information as to what actions they might take given a period of import relief. Although most questionnaire respondents qualified their responses by stating that import relief had to be proven "effective" in order for them to undertake actions aimed at expansion and improvements, 11 producers listed actions of an organizational/operational nature, 7, of a technological nature, and 9 stated they would undertake significant capital investment projects.

Organizational/operational actions

Chief among the actions comtemplated by firms in an import relief period was the increase in sales, which would result in greater production capacity utilization and lower costs. Five firms stated that if a relief period resulted in increased sales, it would allow them to rehire workers now laid-off. * * * .

Technological action

Chief among the actions contemplated by firms in the area of technology involves the development of new alloys and investment in advanced refining techniques, such as electroslag refining, to assist in new alloy development.

Capital investment

Most capital investment projects envisioned by the specialty steel industry during a relief period involve the modernization of existing equipment and small additions to melting, refining, and rolling facilities in order to provide a better balance between melt shop and rolling mill capacities. Except for the proposed J&L acquisition of the Midland stainless flat-rolled products facility, and * * *, no major investment projects to expand capacities were reported.

Foreign Producers

In order to assist the Commission in its determination as to whether increased imports are a substantial cause of threat of serious injury to the U.S. industry producing the stainless and alloy steel products which are the subjects of the investigation, requests for data concerning foreign producers names, locations, production, capacities, and exports of the subject products were sent to counsel representing foreign producers. In addition, similar requests were made of the U.S. embassies in the major specialty-steel-producing countries. Responses, especially from U.S. embassy sources, were incomplete. A summary of the responses received, by countries, are given below.

Belgium

The major producer of specialty steel products in Belgium is ALZ naamloze Vennootschap (ALZ). The firm produces only stainless steel products, primarily flat-rolled products such as sheet, strip, and plates.

* * * * * * *

West Germany

The four major producers of specialty steel in West Germany which account for the bulk of export sales to the U.S. market are ARBED Saarstahl GmbH; Edelstahlwerke Buderus AG; Krupp Stahl, AG; and Thyssen Edelstahlwerke Ag. All of these firms except Buderus are affiliated with major European carbon steel producers. Thyssen is by far the largest specialty steel exporter from West Germany to the United States.

Counsel for the West German Specialty Steel Association was unable to provide data on production and production capacity of stainless steel and alloy tool steel products to the Commission. Exports of West German specialty steel products to the United States * * *. 1/ Exports to the United States as a share of total exports * * *, from * * * in 1980 to * * * in 1982. Counsel for the West German Specialty Steel Association states that no substantial deviation in the amount of U.S. sales is anticipated by West German producers for the 1983-1984 period.

France

According to information provided by the U.S. Department of State, there are three known French producers of stainless steel sheet and strip: Ugine-Gueugnon, Peugeot Loire, and the Chatillon division of Usinor. Ugine-Gueugnon produces numerous stainless steel products, including hot- and cold-rolled sheet and strip, and this company was the principal exporter of French stainless steel sheet and strip. Peugeot Loire is a small producer of cold-rolled sheet and strip, and Chatillon produces slabs and cold-rolled sheet.

France's production of stainless steel sheet and strip declined by 11 percent during 1980-82, from 295,285 tons in 1980 to 263,190 tons in 1982. Utilization of France's capacity to produce stainless steel sheet and strip declined from 92.3 percent in 1980 to 82.2 percent in 1982; capacity remained stable at 320,000 tons. France exported approximately 50 to 60 percent of the stainless steel sheet and strip it produced during this period primarily to the EC. Exports to the United States steadily increased, climbing from 6,217 tons in 1979 to 17,994 tons in 1982, and the share of French stainless steel sheet and strip exports destined for the United States rose from 4 percent in 1980 to 14 percent in 1982.

Japan

There are approximately 20 producers of specialty steel in Japan. The three largest producers are Nippon Steel Corp., the world's largest steel producer, which is the only specialty steel producer in Japan producing both flat and round products, Nisshin Steel Co., the largest flat-rolled products producer; and Daido Steel Co., the largest round products producer.

1/ Data for 1982 are annualized from January-November 1982 data.

Counsel for the Joint Committee for the Stainless and Specialty Steel Industries of Japan was unable to provide data on capacity utilization of specialty steel products in Japan. Production of specialty steel products declined from 1,988,659 tons in 1980 to 1,736,705 tons in 1982, or by 13 percent. 1/ Exports of Japanese specialty steel products to the United States also decreased, from * * * in 1980 to * * * in 1982, or by about 7 percent. U.S. exports as a share of total Japanese exports have remained relatively stable, increasing from 7 to 8 percent of total exports during 1980-82. * * *.

Republic of Korea

Only one firm in the Republic of Korea, Sammi Corp., manufactures and exports the products which are subject to this investigation. Counsel for Sammi submitted information concerning the firm's operations, as shown in the following tablulation:

Stainless steel	1980	1981	1982
Production----------short tons-----	***	***	***
Rolling capacity----------do-------	***	***	***
Capacity utilization--percent------	***	***	***
Exports-------------short tons-----	***	***	***

Sammi's rolling capacity is expected to * * * short tons during 1983 and 1984.

Sweden

There are approximately 10 producers of specialty steel products in Sweden. Production is concentrated in tool steels and special alloy stainless steels. Major producers include Fagersta AB, a producer of cold-rolled stainless steel strip and wire rod; Sandvik AB, a producer of hot-rolled and forged bar and wire rod; and Uddehldm AB, a producer of a full range of stainless steel products. Data on Swedish production and capacity to produce specialty steel products, as provided by counsel for the Swedish Ironmasters Association, are presented in the following tabulation:

All specialty steel	1980	1981	1982
Production----------short tons--	***	***	***
Capacity------------------do----	***	***	***
Capacity utilization--percent--	***	***	***

The previous tabulation shows Swedish capacity utilization * * * from 1980 to 1982, * * *. Counsel for the Swedish Ironmasters' Association states that capacity is projected to decline in 1983 due to plant closures, but may rise slightly in 1984.

1/ Data for 1982 are annualized from January-November 1982 data.

Swedish exports of specialty steel products to the United States * * *. Total exports * * * 1982. Exports to the United States during 1983 and 1984 are expected to remain about the same as in previous years, depending on market conditions.

Spain

There are six producers of specialty steel products in Spain, with the majority capable of producing all the products which are the subjects of this investigation. Counsel for the Spanish specialty steel industry states that total stainless and alloy tool steel melt capacity has remained at 455,000 tons from 1980 to 1982, and no changes are contemplated for 1983 and 1984. Production of all specialty steel products increased from 221,000 tons in 1980, representing 48.6 percent capacity utilization, to 242,000 tons in 1982, with 53.2 percent capacity utilization. Complete export data on Spanish specialty steel products were unavailable; counsel stated that continued exports to the U.S. market will depend on market conditions.

United Kingdom

Data on production from British Steel Corp., the predominant producer and exporter of the subject products, were unavailable from counsel and a U.S. Embassy telegram. Hence, the data presented here represent only the much smaller private sector British specialty steel producers (British Independent Steel Producers' Association (BISPA)).

The private sector British specialty steel producers consist of seven firms, of which two, Aurora PCC, and Keepsend Ltd., were permenantly closed in 1982. The private sector producers are concentrated in tool steel and special alloy and special shape stainless steel products, and their production facilities are thought to be somewhat antiquated and more labor intensive than those of other specialty steel producers. Counsel for BISPA states that capacity to produce specialty steel in the private sector is about 50,000 tons per annum, and that capacity utilization is currently at around 31 percent. Exports to the United States are estimated by counsel to be about 1,600 tons in 1982; this represents over 80 percent of total exports from the private sector companies. Counsel for BIPSA states that future export shipments to the United States will remain low due to the limited demand for the specialized products the United Kingdom private sector companies supply to their U.S. customers.

The Impact of Exempting Certain Products from Any Recommended Import Relief Measures

In his November 19, 1982, letter to the Commission requesting the subject investigation, the USTR also requested that the Commission examine and provide advice on the impact of the exemption of four specific products or groups of products from any recommended import relief measures. The specified products were razor blade steel, chipper knife steel, band saw steel, and a type of stainless steel sheet used in the manufacture of stainless-steel-clad aluminum

automotive trim. During the course of the Commission's investigation, various importers and consumers of stainless steel and alloy tool steel also requested exemptions for a number of different products. Each of these products is discussed as follows.

Razor blade steel

This product is provided for in TSUS item 608.26 and is defined as stainless steel strip not over 0.010 inch in thickness and not over 0.9 inch in width, containing by weight not less than 0.6 percent and not over 0.75 percent carbon, and containing by weight not less than 11.5 percent and not over 14.7 percent chromium, certified at time of entry to be used in the manufacture of razor blades. Imports of razor blade steel declined from 748 tons in 1980 to 720 tons in 1981 and then increased to 930 tons in 1981. Imports are thought to account for 100 percent of U.S. consumption. 1/ In investigation No. TA-201-5, the Commission noted that razor blade steel was not produced domestically. The President did not include razor blade steel in the import restrictions announced in Proclamation No. 4445 (June 11, 1976). Foreign producers and consumers of razor blade steel, including the Swedish Ironmasters Association, 2/ the Gillette Co., 3/ Warner-Lambert Co., 4/ British Steel, 5/ the Joint Committee for the Stainless and Specialty Steel Industries of Japan, 6/ and Sandvik, Inc., 7/ have submitted data to the Commission indicating that U.S. firms have not produced razor blade steel since at least 1976 and that domestic producers have been approached by consumers but are not interested in the production of such steel since only small quantities are consumed in the United States.

Domestic producers argue that they once made razor blade steel and still have the production capability to manufacture this product. However, they state that low-priced imports have led to such low prices for razor blade steel that it has not been economical to resume such production. 8/ Domestic producers state that razor blade steel is a significant market which they could supply if it were to become economical to do so.

Chipper knife steel

Chipper knife steel is provided for in TSUSA items 606.9300, 606.9400, 607.3405, 607.5405, 607.7205, 607.8805, 608.3405, 608.4905, and 608.6405. This product is used to make chipper knives, which are used in machines designed to chip wood into pulp and chips. Imports of chipper knife steel

1/ Transcript of the hearing, p. 380.
2/ Posthearing brief, p. 40; transcript of the hearing, pp. 385-387.
3/ Submission dated Feb. 1, 1983.
4/ Submission dated Jan. 28, 1983.
5/ Posthearing brief, pp 2-5; transcript of the hearing, pp. 357-382.
6/ Prehearing brief, pp. 25 and 26; transcript of the hearing, p. 300.
7/ Posthearing brief, pp. 8-12.
8/ Posthearing brief on behalf of the Specialty Steel Industry and the United Steelworkers of America, p. 15.

(items 606.93 and 606.94) 1/ declined from 1,518 tons in 1980 to 1,376 tons in 1981. Imports increased in 1982 to 1,894 tons. Major sources of chipper knife steel in 1982 were West Germany (48.0 percent of total imports), Sweden (31.3 percent), and Japan (15.9 percent).

Imports of chipper knife steel were subject to quota restrictions in accordance with Presidential Proclamation No. 4445 (June 11, 1976). Consistent with the Commission's finding in investigation No. TA-203-3, the President issued Proclamation No. 4459 (Apr. 5, 1978) modifying the import relief so as to exclude chipper knife and band saw steel from the quotas on alloy tool steel. The Swedish Ironmasters Association, 2/ the West German Specialty Steel Association, 3/ the Joint Committee for the Stainless and Specialty Steel Industries of Japan, 4/ the Machine Knife Association, and the Michigan Knife Co. 5/ all support the exemption of chipper knife steel from any recommended import restrictions that might result from the current investigation. These parties argue that there has never been an adequate, reliable, and consistent domestic supply of chipper knife steel. As stated in the prehearing brief submitted on behalf of the Machine Knife Association and the Michigan Knife Co.:

> Because of its limited demand, specific chemical analysis and unusual product forms, domestic specialty steel producers have been unable or unwilling to produce chipper knife steel in quantities necessary to meet the demand of American knife manufactures. Moreover, even when it is available, domestic chipper knife steel has been plagued by serious quality problems that increase the costs and interfere with the production processes of American knife manufacturers. 6/

The Machine Knife Association and the Michigan Knife Co. also noted in their prehearing brief that Congress has twice reduced the rate of duty on imported chipper knife steel. In December 1980, the rate was reduced from 12.5 percent ad valorem to 4.6 percent. 7/ In 1982, further staged reductions of the duty were enacted. 8/

Domestic producers (Specialty Steel Industry) argue against any exemption for chipper knife steel. 9/ Producers advise that chipper knife steel is

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1/ These item numbers contain only imports of chipper knife steel. The other seven TSUSA numbers provided for both chipper knife and band saw steel. However, imports entered under these numbers in 1982 totaled only 30 tons.
2/ Posthearing brief, p. 40; transcript of the hearing, pp. 385-387.
3/ Posthearing brief, pp. 19-20; transcript of the hearing, pp. 441 and 442.
4/ Prehearing brief, pp. 25 and 26; transcript of the hearing, p. 300.
5/ Posthearing brief; transcript of the hearing, pp. 255-264.
6/ Prehearing brief, p. 5.
7/ Public Law No. 96-609.
8/ Public Law No. 97-446.
9/ Posthearing brief, pp. 13 and 14; transcript of the hearing, pp. 190, 213, and 232.

currently produced in the United States, and although they currently supply a very small share of U.S. consumption, they have the capacity to meet all of the domestic demand. 1/ According to domestic producers--

> Economics is the only reason that the domestic industry does not supply a greater portion of U.S. demand. Simply stated, the price is too low. Foreign producers targeted this market by severely underselling the U.S. producers. 2/

The Machine Knife Association concluded its argument for a chipper knife exemption with the following statement:

> . . .if their [chipper knife producers] access to foreign sources of chipper knife steel is cut off or restricted, they will almost certainly be forced to stop producing chipper knives in the United States--resulting in a loss of American jobs and American investments. 3/

Specialty steel producers responded that the problem facing U.S. chipper knife producers was imports of low-priced chipper knives. The exemption of chipper knife steel would not solve the knife producers' problems but would increase the injury to the U.S. specialty steel industry. 4/

Band saw steel

Band saw steel is provided for in TSUSA items 606.9520, 606.9525, 607.3405, 607.5405, 607.7205, 607.8805, 608.3405, 608.4905, and 608.6405. It is used to produce metal-cutting blades for band saws. These saws are used by machine shops and metal fabricators to cut semifinished metal products to a finished size. Imports of band saw steel (TSUSA items 606.9520 and 606.9525) 5/ declined from 34 tons in 1980 to 32 tons in 1981. No imports were reported in 1982. The only sources of imports in 1981 were Japan (56.3 percent of total imports) and West Germany (43.7 percent).

Submissions in support of the exemption of band saw steel imports were received form the West Germany Specialty Steel Association, 6/ the Wallace Barnes Steel Division, the Barnes Group Inc. (importer), 7/ and the Joint

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1/ Posthearing brief, pp. 13 and 14. Al-Tech and Jessop Steel reported total production of 130 tons of chipper knife bar in 1982.
2/ Ibid., p. 14.
3/ Posthearing brief, p. 11.
4/ Posthearing brief, p. 14.
5/ These item numbers contain only imports of band saw steel. The other seven TSUSA numbers provide for both band saw steel and chipper kinfe steel. However, imports entered under these numbers in 1982 totaled only 30 tons.
6/ Posthearing brief, p. 20; transcript of the hearing, pp. 441 and 442.
7/ Posthearing brief.

Committee for the Stainless and Specialty Steel Industries of Japan. 1/ Firms in opposition to the imposition of import restrictions argue that domestically produced band saw steel is not and has not been available in the quantities and qualities necessary to satisfy domestic demand. In its submission, Wallace Barnes stated:

> Despite vigorous and vigilant efforts to secure a domestic source of D6A strip steel (band saw steel), Wallace Barnes must still seek its supplies of band saw steel outside the United States, because domestic manufacturers remain unable or unwilling to produce band saw steel of sufficient quality and in adequate quantities to meet Wallace Barnes' current sales and production needs. 2/

In a separate affidavit, Mr. John Kucinskas, Purchasing Manager of Wallace Barnes, stated that he had approached five different domestic specialty steel companies in the last 8 months in an attempt to develop a domestic source for band saw steel. Four of the producers responded that they could not meet Wallace Barnes' specifications or that they no longer produced band saw steel. The remaining domestic producer offered a product that Wallace Barnes was unable to use.

Domestic producers' responded to the claims of Wallace Barnes by stating that the domestic industry has the facilities and the expertise to produce this product. However, they argued that low-priced imports have driven the price of band saw steel products to the point where they are uneconomical to produce. 3/

Cladding grade (434) stainless steel sheet

In his request of November 19, 1982, the USTR requested advice on the impact of exempting certain stainless steel sheet used to clad aluminum. The product in question is provided for in TSUSA item 607.9020 and is imported from France and used by Texas Instruments, Inc. (TI), in the production of stainless-steel-clad aluminum strip for use as automotive trim. The specifications of the imported product are as follows:

> Stainless steel sheet not under 0.055 inch and not over 0.065 inch in thickness, not under 25.5 inches and not over 26.25 inches in width, which contains in addition to iron, each of the following elements by weight in the amounts specified and which is certified at the time of entry to be imported for use in the manufacture of stainless-steel-clad aluminum automotive trim:

1/ Prehearing brief, pp. 25 and 26.
2/ Posthearing brief, pp. 5 and 6.
3/ Posthearing brief, pp. 14 and 15. * * *.

carbon: none, or not more than 0.12 percent;
chrominum: not less than 16 percent nor more than 18 percent;
molybdenum: not less than 0.75 percent nor more than 1.25 percent.

TI provided the data shown in the following tabulation on its purchases of cladding grade stainless sheet from France:

	Quantity (Short tons)	Value (1,000 dollars)
1978	***	***
1979	***	***
1980	***	***
1981	***	***
1982	***	***

TI stated that since 1969, its primary source of this product had been Crucible, a division of Colt Industries. In 1978, a second source of supply, Ugine Gueugnon, was developed after that firm solicited business from TI. After going through a lengthy qualification process, the French product was approved, and small quantities were purchased. In 1982, Crucible announced that it was closing its stainless steel production facility. At that time, TI increased its purchases of the imported material and placed evaluation orders with three domestic producers. To date, none of these producers has met the standards required by TI. In addition to these firms, TI also contacted Universal-Cyclops, a domestic stainless steel producer and a manufacturer of stainless clad aluminum automotive trim. It is currently evaluating a qualification shipment from Cyclops. 1/ Until Cyclops or another producer is qualified as a supplier (a process that historically takes over 12 months to complete), TI will have a single source of supply. On this basis, TI requested an exemption for its imported material from any import restrictions which might be imposed as a result of this investigation. The French specialty steel producers also support this exemption.

The U.S. specialty steel producers stated that although Crucible is not now in operation, a domestic firm, J&L, has an agreement to purchase and reactivate the plant which produced claddable stainless steel sheet. The industry believes that J&L could supply this product and notes that the firm has applied to TI for qualification. 2/ Domestic producers also contend that four firms are attempting to qualify as suppliers, and that exemption of this product, for which a significant demand is anticipated, would materially reduce the effectiveness of any import relief that might result from this investigation. TI has testified that its intended demand for this product will range from 2,000 to 12,000 tons a year. 3/

1/ Cyclops has reported the production of *** tons of this material in 1982.
2/ Posthearing brief, p. 16.
3/ Posthearing brief, p. 2.

Other products

In addition to the products specifically cited by the USTR, a number of parties to this investigation have also requested exemptions for other products. The products and the party which made the request are shown below:

Product	Interested party
Stainless flapper valve steel	Swedish Ironmasters Association
High-speed tool steel sheet	French Specialty Steel Producers
Rolled alloy tool steel bar (for use as an component in aircraft brake systems).	British Independent Steel Producers Association.
Ground flat alloy tool steel stock	Do.
Alloy tool steel drill rod, 2" or less in diameter.	Do.
Cross rolled tool steel sheet	Do.
Stainless steel sheet or plate for use in making knives and related parts for food processing machinery.	California Saw & Knife Works Spencer Clark 1/
Stainless steel press plates (used in manufacture of laminated sheets).	Bohler Bros. of America
"Lummis" strip steel	Sandvik Inc.
Rotor steel for hystersis motors	Do.
Butcher band saw steel	Do.
Stainless surgical knife steel	Do.

1/ United Kingdom exporter.

All of the requested exemptions were based on the contention that the products in question were either not produced in the United States or were not available in the quantities or qualities necessary to meet domestic demand. Stainless flapper valve steel imports from Sweden in 1982 were less than *** tons. California Saw & Knife Works reported imports of stainless steel sheet of less than * * * in 1982; Bohler Bros. of America estimated annual U.S. consumption of stainless steel press plates to be about *** tons. Data on imports or consumption of other products are not available. U.S. producers have responded that they have the capability to produce all of these products when and if it is economical to do so. Data on U.S. production of these items are not available.

APPENDIX A

USTR'S REQUEST TO THE COMMISSION

A-62

THE UNITED STATES TRADE REPRESENTATIVE

WASHINGTON

20506

November 19, 1982

The Honorable Alfred Eckes
Chairman, United States International
Trade Commission
Washington, D.C.

Dear Mr. Chairman:

In accordance with the determination of the President under Section 301(a)(2)(A) of the Trade Act of 1974 (19 U.S.C. 2411 (a)(2)(A)) of November 17, 1982 (47 FR 51717, November 17, 1982), and pursuant to my authority under Section 201(b)(1) of the Trade Act of 1974 (19 U.S.C. 2251 (b)(1)), I am hereby requesting that the U.S. International Trade Commission promptly make an investigation under Section 201 to determine whether the specialty steel articles described in attachment 1 are being imported into the U.S. in such increased quantities as to be a substantial cause of serious injury, or threat thereof, to the domestic industry producing like or directly competitive articles. I further request that the Commission expedite its investigation and submit its report to the President through me as soon as possible.

Representations have been made to USTR to the effect that certain specialty steel products included in the scope of this request are not produced domestically or are produced in small quantities and that restrictive action under Section 201 with respect to these products would be inappropriate. Therefore, in conducting its examination, the Commission is further requested to examine and provide advice on the impact of exempting the products listed in Attachment 2 from any import relief measures which the Commission may recommend.

Very truly yours,

WILLIAM E. BROCK

WEB:alp

Attachment 1

The specialty steel products provided for in the following item numbers of the Tariff Schedules of the United States Annotated (TSUSA) constitute the subject of this request for an investigation under Section 201 of the Trade Act of 1974.

1. Stainless steel sheet and strip

607.7610	608.2900
607.9010	608.4300
607.9020	608.5700
608.2600	

2. Stainless steel plate

607.7605	607.9005

3. Stainless steel bar

606.9005	606.9010

4. Stainless steel rod

607.2600	607.4300

5. Alloy tool steel

606.9300	607.5420
606.9400	607.7205
606.9505	607.7220
606.9510	607.8805
606.9520	607.8820
606.9525	608.3405
606.9535	608.3420
606.9540	608.4905
607.2800	608.4920
607.3405	608.6405
607.3420	608.6420
607.4600	609.4520
607.5405	609.4550

Attachment 2

Described below are the articles with respect to which USTR has requested the Commission to examine and provide advice on the impact of exemption from any recommended import relief measures.

1. Razor blade steel provided for in TSUSA item number 608.2600;

2. Chipper knife steel provided for in the following TSUSA item numbers:

606.9300	607.3405	608.3405
606.9400	607.5405	608.4905
	607.7205	608.6405
	607.8805	

3. Band saw steel provided for in the following TSUSA item numbers:

606.9520	607.3405	608.3405
606.9525	607.5405	608.4905
	607.7205	608.6405
	607.8805	

4. The following stainless steel sheet product, provided for in TSUSA item number 607.9020:

Stainless steel sheet not under 0.055 inch and not over 0.065 inch in thickness, not under 25.5 inches and not over 26.25 inches in width, which contains in addition to iron, each of the following elements by weight in the amounts specified and which is certified at the time of entry to be imported for use in the manufacture of stainless-steel-clad aluminum automotive trim:

carbon:	none, or not more than 0.12 percent;
chromium:	not less than 16 percent nor more than 18 percent;
molybdenum:	not less than 0.75 percent nor more than 1.25 percent.

APPENDIX B

PRESIDENTIAL MEMORANDUM OF NOVEMBER 16, 1982

Presidential Documents

Memorandum of November 16, 1982

Determination Under Section 301 of the Trade Act of 1974

Memorandum for the United States Trade Representative

Pursuant to Section 301(a)(2) of the Trade Act of 1974 (19 U.S.C. 2411(a)(2)), I have determined that the action described below is an appropriate and feasible response to subsidy practices of the European Community (EC), Belgium, France, Italy, the United Kingdom, Austria and Sweden, which are inconsistent with Articles 8 and 11 of the Agreement on the Interpretation and Application of Articles VI, XVI and XXIII of the General Agreement on Tariffs and Trade (Subsidies Code). With a view toward eliminating the harmful effects of such practices, I am directing the United States Trade Representative (USTR) to: (1) request the United States International Trade Commission to conduct an expedited investigation under Section 201 of the Trade Act of 1974 (19 U.S.C. 2251) with regard to the five specialty steel products subject to the 301 investigation; (2) initiate multilateral and/or bilateral discussions aimed at the elimination of all trade distortive practices in the specialty steel sector; and (3) monitor imports of specialty steel products subject to the 201 proceeding. If during the pendency of the International Trade Commission section 201 investigation imports cause damage which is difficult to repair, consideration would be given to what action, if any, might appropriately be taken on an emergency, interim basis under Section 301 of the Trade Act of 1974, consistent with U.S. international obligations.

Statement of Reasons

The Office of the USTR initiated investigations under Section 301 on February 26, 1982 (47 F.R. 10107) and on August 9, 1982 (47 F.R. 35387) on the basis of petitions filed by the Tool and Stainless Steel Industry Committee and the United Steelworkers of America. Petitioners principally allege that the EC and the above-mentioned countries have subsidized the production of specialty steel in a manner inconsistent with their obligations under Articles 8 and 11 of the Subsidies Code.

Petitioners' allegations are well founded. The United States believes that subsidies have been provided by the Government of Austria in the form of grants and capitalization, by the Government of Sweden in the form of preferential loans, loan guarantees and grants, and by the European Communities and its member governments in the form of preferential loans, loan guarantees, capital grants, "recapitalization" of financial losses, interest rebate programs, exemptions from taxation, and other practices.

The injury to the domestic industry is clear. The specialty steel industry is an efficient, technologically up-to-date and export-oriented branch of the steel industry. Its output is used in a wide range of demanding applications critical to an industrial economy and thus commands a price far higher than ordinary steel. Regarded as an advanced, innovative and competitive industry, specialty steel producers in the United States have tended to be more profitable than the industry as a whole and far more so than most of their major competitors abroad. Nevertheless, the industry is facing an unprecedented challenge to its continued prosperity, and a number of its member firms are fighting for survival.

Part of the problem can be traced to the recession that began in America's basic industries more than two years ago. However, it is clear that since the

lifting of import quotas in February 1980, imports have steadily captured a larger share of the U.S. market, further depressing operating rates, employment, prices and revenues. Through the first eight months of 1982, imports were at historically high levels, with import penetration ratios ranging from 11 to more than 50 percent, depending on the product. In every product category, imports now exceed the surge levels established by the Department of Commerce.

The majority of these imports are currently under investigation for unfair trade practices under Section 301, the countervailing duty statute, or the antidumping duty statute. However, they do not cover all important, or potentially important, sources of specialty steel imports. A partial remedy against unfair imports can be rendered meaningless by a substitution of new foreign suppliers for those whose shipments are affected. Thus, the specific subsidy complaints could lead to a remedy that fails to resolve the overall import problem. Moreover, dealing with the specific subsidy problem itself probably would not have a great impact on the world steel trading environment in which our industry must compete. Subsidies are only one of a wide range of trade restrictive and trade distortive practices that many of our trading partners engage in to protect their industries and to stimulate exports. If we are ever to put an end to constant trade disputes in steel, we must stop dealing with discrete import and export issues in isolation and instead begin a coordinated approach to the problem. By combining the Section 201 and Section 301 approaches, the United States hopes to stabilize the immediate import situation and to reverse the global trend toward greater excess capacity, increased subsidization, and closed markets.

This determination shall be published in the Federal Register.

Ronald Reagan

THE WHITE HOUSE,
Washington, November 16, 1982.

APPENDIX C

COMMISSION'S NOTICE OF INSTITUTION

Commission requests written comments from interested persons concerning the effect of the termination of this investigation based upon the settlement agreement upon (1) the public health and welfare, (2) competitive conditions in the U.S. economy, (3) the prodution of like or directly competitive articles in the United States, and (4) U.S. consumers. Written comments must be filed with the Secretary to the Commission no later than 30 days after publication of this notice in the Federal Register. Any person desiring to submit a document (or portion thereof) to the Commission in confidence must request confidential treatment. Such requests should be directed to the Secretary of the Commission and must include a full statement of the reasons why the Commission should grant such treatment. The Commission will either accept such submission in confidence or return it. All nonconfidential written submissions will be open for public inspection at the Secretary's office, as is a copy of the settlement agreement.

FOR FURTHER INFORMATION CONTACT: Catherine R. Field, Esq. Office of the General Counsel, U.S. International Trade Commission, 701 E Street N.W., Washington, D. C. 20436, Telephone (202) 523-0143.

Issued: December 7, 1982.

By order of the Commission.

Kenneth R. Mason,

Secretary.

[FR Doc. 82-34020 Filed 12-14-82; 8:45 am]

BILLING CODE 7020-02-M

[Investigation No. TA-201-48]

Stainless Steel and Alloy Tool Steel

AGENCY: International Trade Commission.

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

EFFECTIVE DATE: December 9, 1982.

SUMMARY: Following receipt of a request by the United States Trade Representative (USTR) for an investigation under section 201 of the Trade Act of 1974 of certain imported stainless steel and alloy tool steel products, the United States International Trade Commission hereby gives notice of the institution of investigation No. TA-201-48 under section 201(b)(1) of the act (19 U.S.C. 2251) to determine whether bars; wire rods; and plates, sheets, and strips, not cut, not pressed, and not stamped to rectangular shape; all the foregoing of stainless steel or certain alloy tool steel; and round wire of high speed tool steel, provided for in items 606.90, 606.93, 606.94, 606.95, 607.26, 607.28, 607.34, 607.43, 607.46, 607.54, 607.72, 607.76, 607.86, 607.90, 608.26, 608.29, 608.34, 608.43, 608.49, 608.57, 608.64, and 609.45 of the Tariff Schedules of the United States, are being imported into the United States in such increased quantities as to be a substantial cause of serious injury, or the threat thereof, to the domestic industry producing articles like or directly competitive with the imported articles. The Commission must report its determination to the President by May 23, 1983; however, the Commission intends to expedite this investigation and transmit its report by May 6, 1983.

FOR FURTHER INFORMATION CONTACT: Daniel Leahy, Senior Investigator (202/523-1369) or James McClure, Suprervisory Investigator (202/523-0439), Office of Investigations, U.S. International Trade Commission, Washington, D.C. 20436.

SUPPLEMENTARY INFORMATION:

Background.—In accordance with a determination of the President on November 17, 1982 (47 FR 51717), under section 301(a)(2)(A) of the Trade Act of 1974 (19 U.S.C. 2411(a)(2)(A)), the USTR, in a letter received by the Commission on November 23, 1982 (copy attached), requested that the Commission conduct an expedited investigation under section 201 of the act concerning imports of certain stainless steel and alloy tool steel products. The President's action followed the completion of investigations under section 301 of the act initiated by USTR on February 26, 1982 (47 FR 10107) and on August 9, 1982 (47 FR 36387). These investigations were instituted on the basis of petitions, filed by the Tool and Stainless Steel Industry Committee and the United Steelworkers of America, alleging that the European Community, Belgium, France, Italy, the United Kingdom, Austria, and Sweden had subsidized the production of stainless and alloy tool steel (specialty steel) in a manner inconsistent with their obligations under Articles 8 and 11 of the Agreement on the Interpretation and Application of Articles VI, XVI and XXIII of the General Agreement on Tariffs and Trade (Subsidies Code).

Participation in the investigation.—Persons wishing to participate in this investigation as parties must file an entry of appearance with the Secretary to the Commission, as provided in section 201.11 of the Commission's Rules of Practice and Procedure (19 CFR 201.11, as amended by 47 FR 6189, Feb. 10, 1982), not later than 21 days after the publication of this notice in the Federal Register. Any entry of appearance filed after this date will be referred to the Chairman, who shall determine whether to accept the late entry for good cause shown by the person desiring to file the entry.

Upon the expiration of the period for filing entries of appearance, the Secretary shall prepare a service list containing the names and addresses of all persons, or their representatives, who are parties to the investigation, pursuant to section 201.11(d) of the Commission's rules (19 CFR 201.11(d), as amended by 47 FR 6189, Feb. 10, 1982). Each document filed by a party to this investigation must be served on all other parties to the investigation (as identified by the service list), and a certificate of service must accompany the document. The Secretary will not accept a document for filing without a certificate of service (19 CFR 201.16(c), amended by 47 FR 33682, Aug. 4, 1982).

Hearing.—The Commission will hold a hearing in connection with this investigation beginning at 10:00 a.m., on February 9, 1983, at the U.S. International Trade Commission Building, 701 E Street, NW., Washington, D.C. 20436(19 CFR 201.13). Request to appear at the hearing should be filed in writing with the Secretary to the Commission not later than the close of business (5:15 p.m.) on January 26, 1983.

Prehearing procedures.—To facilitate the hearing process, it is requested that persons wishing to appear at the hearing submit prehearing briefs enumerating and discussing the issues which they wish to raise at the hearing. An original and fourteen copies of such prehearing briefs should be submitted to the Secretary no later than the close of business on February 2, 1983 (19 CFR 201.8). Confidential submissions should be in accordance with the requirements of section 201.6 of the Commission's rules (19 CFR 201.6). Copies of any prehearing briefs submitted will be made available for public inspection in the Office of the Secretary. Any prepared statement submitted will be made a part of the transcript. Oral presentations at the hearing should, to the extent possible, be limited to issues raised in the prehearing briefs.

A prehearing conference will be held on Thursday, January 27, 1983, at 10:00 a.m., in Room 117 of the U.S. International Trade Commission Building.

Written submissions.—As mentioned, parties to this investigation may file prehearing briefs by the date shown above. Posthearing briefs must be submitted no later than close of business on February 18, 1983. In addition, any person who has not entered an appearance as a party to the

investigation may submit a written statement of information pertinent to the subject of the investigation on or before February 18, 1983. A signed original and fourteen copies of each submission must be filed with the Secretary to the Commission. All written submissions, except for confidential business information, will be available for public inspection during regular business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary to the Commission.

November 19, 1982.

The Honorable Alfred Eckes

Chairman, United States International Trade Commission,

Washington, D.C.

Dear Mr. Chairman: In accordance with the determination of the President under Section 301(a)(2)(A) of the Trade Act of 1974 (19 U.S.C. 2411 (a)(2)(A)) of November 17, 1982 (47 FR 51717, November 17, 1982), and pursuant to my authority under Section 201(b)(1) of the Trade Act of 1974 (19 U.S.C. 2251(b)(1)), I am hereby requesting that the U.S. International Trade Commission promptly make an investigation under Section 201 to determine whether the specialty steel articles described in attachment 1 are being imported into the U.S. in such increased quantities as to be a substantial cause of serious injury, or threat thereof, to the domestic industry producing like or directly competitive articles. I further request that the Commission expedite its investigation and submit its report to the President through me as soon as possible.

Representations have been made to USTR to the effect that certain specialty steel products included in the scope of this request are not produced domestically or are produced in small quantities and that restrictive action under Section 201 with respect to these products would be inappropriate. Therefore, in conducting its examination, the Commission is further requested to examine and provide advice on the impact of exempting the products listed in Attachment 2 from any import relief measures which the Commission may recommend.

Very truly yours.

William E. Brock.

Attachment 1

The specialty steel products provided for in the following item numbers of the Tariff Schedules of the United States Annotated (TSUSA) constitute the subject of this request for an investigation under Section 201 of the Trade Act of 1974.

1. Stainless steel sheet and strip

607.7610	608.2900
607.9010	608.4300
607.9020	608.5700
608.2600	

2. Stainless steel plate

607.7105	607.9005

3. Stainless bar

606.9005	606.9010

4. Stainless steel rod

607.2600	607.4300

5. Alloy tool steel

606.9300	607.5420
606.9400	607.7205
606.9505	607.7220
606.9510	607.8805
606.9520	607.8820
606.9525	608.3405
606.9535	608.3420
606.9540	608.4905
607.2800	608.4920
607.3405	608.6405
607.3420	608.6420
607.4600	609.4520
607.5405	609.4550

Attachment 2

Described below are the articles with respect to which USTR has requested the Commission to examine and provide advice on the impact of exemption from any recommended import relief measures.

1. Razor blade steel provided for in TSUSA item number 608.2600;

2. Chipper knife steel provided for in the following TSUSA item numbers:

606.9300	607.8805
606.9400	608.3405
607.3405	608.4905
607.5405	608.6405
607.7205	

3. Band saw steel provided for in the following TSUSA item numbers:

606.9520	607.8805
606.9525	608.3405
607.3405	608.4905
607.5405	608.6405
607.7205	

4. The following stainless steel sheet product, provided for in TSUSA item numbers 607.9020:

Stainless steel sheet not under 0.055 inch and not over 0.065 inch in thickness, not under 25.5 inches and not over 26.25 inches in width, which contains in addition to iron, each of the following elements by weight in the amount specified and which is certified at the time of entry to be imported for use in the manufacture of stainless-steel-clad aluminum automotive trim:

Carbon: none, or not more than 0.12 percent;

Chromium: not less than 16 percent nor more than 18 percent;

Molybdenum: not less than 0.75 percent nor more than 1.25 percent.

Any business information for which confidential treatment is desired shall be submitted separately. The envelope and all pages of such submissions must be clearly labeled "Confidential Business Information." Confidential submissions and requests for confidential treatment must conform with the requirements of section 201.6 of the Commission's rules (19 CFR 201.6).

Remedy.—In the event that the Commission makes an affirmative injury determination in this investigation, a public hearing on the subject of remedy recommendations will be held beginning at 10:00 a.m., on April 5, 1983, at the U.S. International Trade Commission Building. A prehearing conference will be held on Friday, March 25, 1983 at 10:00 a.m., in Room 117 of the U.S. International Trade Commission Building. Prehearing briefs will be due to the Secretary no later than the close of business on March 31, 1983, and must conform with the requirements of sections 201.6 and 201.8 of the Commission's rules. Posthearing briefs will be due to the Secretary no later than the close of business on April 8, 1983.

Inspection of request for investigation.—The request for an investigation filed in this case is available for public inspection at the Office of the Secretary, U.S. International Trade Commission.

For further information concerning the conduct of the investigation, hearing process, and rules of general application, consult the Commission's Rules of Practice and Procedure, 19 CFR § 201, as amended by 47 FR 6188, Feb. 10, 1982; 47 FR 13791, Apr. 1, 1982; and 47 FR 33682, Aug. 4, 1982, and part 206, subparts A and B (19 CFR 206 subparts A and B).

Issued: December 10, 1982.

By order of the Commission.

Kenneth R. Mason,

Secretary.

[FR Doc. 82-34016 Filed 12-14-82; 8:45 am]

BILLING CODE 7020-02-M

[Investigation No. 337-TA-124]

Textile Spinning Frames With Automatic Doffers; Proposed Termination of Investigation as to Two Respondents on the Basis of a Settlement Agreement and Request for Public Comments

AGENCY: International Trade Commission.

ACTION: Request for public comments on the proposed termination of two respondents in the above-captioned investigation based on a settlement agreement.

SUMMARY: Notice is hereby given that a joint motion has been filed to terminate the above-captioned investigation with respect to respondents Toyoda Automatic Loom Works, Ltd., and Toyoda Textile Machinery, Inc. ("Toyoda") on the basis of a settlement agreement executed by complainant Platt Saco Lowell Corp. (PSL) and the aforementioned respondents. Before taking final action on the motions, the Commission requests that interested members of the public submit written comments on the proposed termination

APPENDIX D

CALENDAR OF WITNESSES FOR THE COMMISSION'S PUBLIC HEARING

TENTATIVE CALENDAR OF PUBLIC HEARING

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

Subject : Stainless Steel and Alloy Tool Steel

Inv. No. : TA-201-48

Date and time: February 9, 1983 - 10:00 a.m.

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

Congressional appearance:

Honorable Doug Walgren, United States Congressman, State of Pennsylvania

Office of the United States Trade Representative:

Honorable Charles Blum, Deputy Assistant

PARTIES IN SUPPORT OF THE IMPOSITION OF IMPORT RELIEF MEASURES

Collier, Shannon, Rill & Scott--Counsel
Washington, D.C.
on behalf of

The Specialty Steel Industry of the United States and the United Steelworkers of America ("USW")

Adolph J. Lena, Chairman of the Board and Chief Executive Officer, Al Tech Specialty Steel Corp.

Jack Sheehan, Vice President, United Steelworkers of America

Richard P. Simmons, President and Chief Executive Officer, Allegheny Ludlum Steel Corporation

Paul R. Roedel, President and Chief Executive Officer, Carpenter Technology Corporation

W. H. Knoell, President, Cyclops Corporation

F. H. Cheffy, President, Armco Stainless Steel Division, Armco, Inc.

Stanley Nehmer, President, Economic Consulting Services, Inc.

Paul W. Marshall, President, Marshall & Bartlett, Inc.

Thomas F. Shannon)
David A. Hartquist)--OF COUNSEL

PARTIES IN OPPOSITION TO THE IMPOSITION OF IMPORT RELIEF MEASURES

California Saw and Knife Works, San Francisco, California

Myron Bird, Chairman of the Board

Peabody, Lambert & Meyers--Counsel
Washington, D.C.
on behalf of

The Michigan Knife Company and the Machine Knife Association

John E. Halloran, President of Michigan Knife Co. and President of the Machine Knife Association

Ralph C. Fox, Purchasing Manager, Simonds Cutting Tools of Fitchburg, Massachusetts

Herbert Kartanos, Director of Sales and Marketing, R. Hoe & Co., Inc., of Scarsdale, New York

Glen R. Reichardt)
Peter N. Hiebert)--OF COUNSEL

OTHER INTERESTED PARTY

Texas Instrument Incorporated, Attleboro, Massachusetts

Paul K. Moffat, Director of Procurement and Material Management

PARTIES IN OPPOSITION TO THE IMPOSITION OF IMPORT RELIEF MEASURES

Coudert Brothers--Counsel
Washington, D.C.
on behalf of

Wallace Barnes Steel Division, Barnes Group, Inc.

Marvin Kelly, General Manager

Milo G. Coerper)
Bruce C. Mee) --OF COUNSEL

Arter, Hadden & Hemmendinger--Counsel
Washington, D.C.
on behalf of

The Joint Committee for the Stainless and Specialty Steel Industries of Japan, Tokyo, Japan

John G. Reilly, ICF Incorporated

Noel Hemmendinger)
William H. Barringer)
Thomas A. Ehrgood, Jr.) --OF COUNSEL
William Clintong)

Steptoe & Johnson Chartered--Counsel
Washington, D.C.
on behalf of

British Steel Corporation and British Steel Corporation, Inc.

Michael Sandler)
Ms. Lindsey B. Lang) --OF COUNSEL

Beveridge & Diamond, P.C.--Counsel
Washington, D.C.
on behalf of

British Independent Steel Producers Association (BISPA)

Alexander W. Sierck--OF COUNSEL

Hale, Russell & Gray--Counsel
Washington, D.C.
on behalf of

Swedish Ironmasters Association (Jernkontoret)

Avesta Jernverks AB
Bulten-Kanthal AB
Fagersta AB
Kloster Speedsteel AB
Nyby Uddeholm AB
Sandvik AB
Uddeholms AB
Uddeholm Strip Steel AB
SKF-Steel, a division of SKFAB

David Nixon, American Safety Razor Co.

John Thullen, De-Sta-Co Corp.

Edward Mayle, Vice President, Steel - Sandvik, Inc.

Patrick D. Gill, Esq., Rode & Qualey - " "

R.S.D. Veal, President, Uddeholm Steel Corporation

Kenneth H. Betts, Vice President, Fagersta, Inc.

Louis H. Kurrelmeyer)
Malcolm A. MacIntyre) --OF COUNSEL

Robert M. Gottschalk, P.C.--Counsel
New York, N.Y.
on behalf of

N.V. ALZ S.A., a Belgian producer

Melvin S. Schwechter--OF COUNSEL

Coudert Brothers--Counsel
Washington, D.C.
on behalf of

Edelstahl-Vereinigung, the German Specialty Steel Association

Milo G. Coerper)
Mark D. Herlack) --OF COUNSEL

Covington & Burling--Counsel
Washington, D.C.
on behalf of

The Association of French Specialty Steel Producers

Harvey M. Applebaum--OF COUNSEL

George V. Egge, Jr., P.C.--Counsel
Washington, D.C.
on behalf of

The Union de Empresas Side-rurgicas (UNESID), The Spanish Steel Producers' Association and its member companies

George V. Egge, Jr.--OF COUNSEL

Daniels, Houlihan & Palmeter--Counsel
Washington, D.C.
on behalf of

Sammi Corporation, the sole producer and exporter of specialty steel products in the Republic of Korea

N. David Palmeter--OF COUNSEL

APPENDIX E

STATISTICAL TABLES

Table 1.--Stainless steel plate, and sheet and strip: U.S. rates of duty, by TSUSA items, as of Jan. 1, 1983

TSUSA item No., 1980-83	Article	Rate of duty 1/	
		Col. 1	Col. 2
607.7605	Stainless steel plates, not pickled and not cold-rolled, not coated or plated with metal, not clad.	9.5% ad val. + additional duties.	28% ad val. + additional duties.
607.7610	Stainless steel sheets, not pickled and not cold-rolled, not coated or plated with metal, not clad.	9.5% ad val. + additional duties.	28% ad val. + additional duties.
607.9005	Stainless steel plates, pickled or cold-rolled, not coated or plated with metal, not clad.	10% ad val. + additional duties.	0.2¢ per lb + 28% ad val. + additional duties.
607.9010	Stainless steel sheets, pickled but not cold-rolled, not coated or plated with metal, not clad.	10% ad val. + additional duties.	0.2¢ per lb + 28% ad val. + additional duties.
607.9020	Stainless steel sheets, cold-rolled, not coated or plated with metal, not clad.	10% ad val. + additional duties.	0.2¢ per lb + 28% ad val. + additional duties.
607.2600	Razor blade steel----------	7% ad val. + additional duties.	33% ad val. + additional duties.
608.2900	Other stainless steel strip, not over 0.01 inch in thickness.	8% ad val. + additional duties.	33% ad val. + additional duties.
608.4300	Stainless steel strip, over 0.01 but not over 0.05 inch in thickness.	10.5% ad val. + additional duties.	33% ad val. + additional duties.
608.5700	Stainless steel strip, over 0.05 inch in thickness.	11.5% ad val. + additional duties.	33% ad val. + additional duties.

1/ Stainless steel sheet and strip are also subject to additional cumulative duties on alloy content, shown in table 2.

Table 2.--Stainless steel bar and wire rod: U.S. rates of duty, as of Jan. 1, 1983

TSUSA item No., 1980-83	Article description (abridged)	Rate of duty 1/	
		Col. 1	Col. 2
606.9005	Stainless steel bar: Not cold-formed	10.5% ad val. + additional duties.	28% ad val. + additional duties.
606.9010	Cold-formed	10.5% ad val. + additional duties.	28% ad val. + additional duties.
607.2600	Stainless steel wire rod, not tempered, not treated, and not partly manufactured.	4.3% ad val. + additional duties.	11% ad val. + additional duties.
607.4300	Stainless steel wire rod, tempered, treated, or partly manufactured.	4.6% ad val. + additional duties.	10% ad val. + additional duties.

1/ Stainless steel bar and wire rod are also subject to additional cumulative duties on alloy content as follows:

TSUS item No., 1980-83	Article	Rate of duty	
		Col. 1	Col. 2
606.00	Chromium content over 0.2 percent by weight.	0.1% ad val.	1% ad val.
606.02	Molybdenum content over 0.1 percent by weight.	0.3% ad val.	1% ad val.
606.04	Tungsten content over 0.3 percent by weight.	0.4% ad val.	1% ad val.
606.06	Vanadium content over 0.1 percent by weight.	0.2% ad val.	1% ad val.

Table 3.--Tool steel, all forms: U.S. rates of duty, as of Jan. 1, 1983

TSUSA item No.	Article description	Rate of duty 1/	
		Col. 1	Col. 2
	Tool steel bar:		
	Chipper knife steel bar:		
606.9300	Not cold-formed	4.6% ad val. + additional duties. 2/	28% ad val. + additional duties.
606.9400	Cold-formed	10.5% ad val. + additional duties.	28% ad val. + additional duties.
	Other tool steel bar:		
	High-speed tool steel:		
606.9505	Not cold-formed	10.5% ad val. + additional duties.	28% ad val. + additional duties.
606.9510	Cold-formed	10.5% ad val. + additional duties.	28% ad val. + additional duties.
	Band saw steel:		
606.9520	Not cold-formed	10.5% ad val. + additional duties.	28% ad val. + additional duties.
606.9525	Cold-formed	10.5% ad val. + additional duties.	28% ad val. + additional duties.

Table 3.--Tool steel, all forms: U.S. rates of duty, as of Jan. 1, 1983--Continued

TSUSA item No.	Article description	Rate of duty 1/	
		Col. 1	Col. 2
606.9535	Other:		
	Not cold-formed	10.5% ad val. + additional duties.	28% ad val. + additional duties.
606.9540	Cold-formed	10.5% ad val. + additional duties.	28% ad val. + additional duties.
	Tool steel wire rod, not tempered, not treated, and not partly manufactured:		
607.2800	High-speed	4.2% ad val. + additional duties.	11% ad val. + additional duties.
	Other:		
607.3405	Chipper knife tool steel and band saw tool steel.	4.9% ad val. + additional duties.	11% ad val. + additional duties.
607.3420	Other	4.9% ad val. + additional duties.	11% ad val. + additional duties.

See footnotes at end of table.

Table 3.--Tool steel, all forms: U.S. rates of duty, as of Jan. 1, 1983--Continued

TSUSA item No.	Article description	Rate of duty 1/	
		Col. 1	Col. 2
	Tool steel wire rod, tempered, treated, or partly manufactured:		
607.4600	High-speed	4.3% ad val. + additional duties.	10% ad val. + additional duties.
	Other:		
607.5405	Chipper knife steel and band saw steel.	5.9% ad val. + additional duties.	10% ad val. + additional duties.
607.5420	Other	5.9% ad val. + additional duties.	10% ad val. + additional duties.
	Plates and sheets, not pickled or cold rolled:		
607.7205	Chipper knife and band saw steel	9.5% ad val. + additional duties.	28% ad val. + additional duties.
607.7220	Other	9.5% ad val. + additional duties.	28% ad val. + additional duties.
	Plates and sheets, pickled or cold-rolled:		
607.8805	Chipper knife and band saw steel	10% ad val. + additional duties.	0.2¢/lb + 28% ad val. + additional duties.
607.8820	Other	10% ad val. + additional duties.	0.2¢/lb + + 28% ad val. + additional duties.
	Tool steel strip; not over 0.01 inch in thickness:		
608.3405	Chipper knife and band saw steel	8% ad val. + additional duties.	

Table 3.--Tool steel, all forms: U.S. rates of duty as of Jan. 1, 1983--Continued

TSUSA item No.	Article description	Rate of duty 1/	
		Col. 1	Col. 2
	Tool steel strip (cont.):		
608.3420	Other	8% ad val. + additional duties.	33% ad val. + additional duties.
	Tool steel strip, over 0.01 but not over 0.05 inch in thickness:		
608.4905	Chipper knife and band saw steel	10.5% ad val. + additional duties.	33% ad val. + additional duties.
608.4920	Other	10.5% ad val. + additional duties.	33% ad val. + additional duties.
	Tool steel strip, over 0.5 inch in thickness:		
608.6405	Chipper knife and band saw steel	11.5% ad val. + additional duties.	33% ad val. + additional duties.
608.6420	Other	11.5% ad val. + additional duties.	33% ad val. + additional duties.
	Tool steel round wire:		
	High speed tool steel,		
609.4520	under 0.060 inch in diameter	10% ad val. + additional duties.	33% ad val. + additional duties.
	High speed tool steel,		
609.4550	0.060 inch or more in diameter	10% ad val. + additional duties.	33% ad val. + additional duties.

1/ Tool steel products are also subject to additional cumulative duties on alloy contents, as shown in table 2.

Table 4.--U.S. producers of specialty products, by locations and by products, as of January-March 1982

Company and location	Raw specialty steel production	Stainless steel plate	Long products 1/	Tool steel products	Stainless steel sheet and strip	Carbon steel products
Al tech Specialty Steel Corp., Dunkirk, N.Y	X		X	X		
Allegheny Ludlum Steel Corp., Pittsburgh, Pa	X	X	X	X	X	
Armco, Inc., Middletown, Ohio	X		X		X	X
Babcock & Wilcox, Beaver Falls, Pa	X		X			
Bethlehem Steel Corp., Bethlehem, Pa 2/	X		X		X	X
Carpenter Technology Corp., Reading, Pa	X		X	X	X	
Champion Steel Corp., Orwell, Ohio	X			X		
Crucible, Inc., Syracuse, N.Y. 3/	X		X	X	X	
Columbia Tool Steel Co., Chicago, Heights, Ill	X			X		
Continental-Braeburn Co., Lower Burrell, Pa	X			X		
Cooperweld Corp., Pittsburgh, Pa	X			X		
Cyclops Corp., Pittsburgh, Pa	X		X	X	X	
Eastern Stainless Steel Co., Cockeysville, Md	X	X	X		X	
Electralloy Corp., New York, N.Y	X	X	X	X		
A. Finkl & Sons, Chicago, Ill	X			X		
Green River Steel Co., Owensboro, Ky	X		X			
Guterl Special Steel Corp., Lockport, N.Y	X	X	X	X	X	
Ingersoll-Johnson Steel Co., New Castle, Ind	X	X		X		
Jessop Steel Co., Washington, Pa	X	X	X	X	X	

See footnotes at end of table.

Table 4.--U.S. producers of specialty products, by locations and by products, as of January-March 1982--Continued

Company and location	Raw specialty steel production	Stainless steel plate	Long products 1/	Tool steel products	Stainless steel sheet and strip	Carbon steel products
Jones & Laughlin Steel Corp., Pittsburgh, Pa	X	X			X	X
Joslyn Stainless Steel Div. of Stater Steel, Inc., Fort Wayne, Ind	X		X			
National Forge Co., Irvine, Pa	X			X		
Newman-Crosby Steel, Inc., Pawtucker, R.I					X	
Republic Steel Corp., Cleveland, Ohio	X	X	X		X	X
Teledyne-Vasco, Inc., Latrobe, Pa	X	X	X	X	X	
Timken Co., Canton, Ohio	X			X		X
Latrobe Steel Co., Latrobe, Pa	X			X		
United States Steel Corp., Pittsburgh, Pa	X	X	X		X	X
Washington Steel Corp., Washington, Pa	X	X			X	

1/ Stainless steel hot-rolled and cold-formed bar, and wire rod.
2/ Bethlehem Steel Corp. ceased production of tool products in 1981.
3/ Crucibles Midland, Pa., facility, which produced stainless steel flat-rolled products, was purchased by Jones & Laughlin Steel Corp. in October 1982.

Table 5.--Stainless steel and alloy tool steel: U.S. producers' shipments, imports for consumption, exports of domestically produced merchandise, and apparent U.S. consumption, 1978-82

Year	Shipments	Imports	Exports	Apparent consumption	Ratio of imports to--	
					Shipments	Consumption
	1,000 short tons				Percent	
1978	1,152	163	51	1,264	14.1	12.9
1979	1,311	150	74	1,387	11.4	10.8
1980	1,083	130	112	1,101	12.0	11.8
1981	1,108	176	65	1,219	15.9	14.4
1982	854	203	39	1,018	23.8	19.9

Source: Shipments, compiled from data of the American Iron & Steel Institute; imports and exports, compiled from official statistics of the U.S. Department of Commerce.

Table 6.--Stainless steel: U.S. producers' shipments, imports for consumption, exports of domestically produced merchandise, and apparent U.S. consumption, 1978-82

Year	Shipments	Imports	Exports	Apparent consumption	Ratio of imports to--	
					Shipments	Consumption
	1,000 short tons				Percent	
1978	1,060	138	47	1,152	13.0	12.0
1979	1,215	117	69	1,263	9.6	9.3
1980	1,005	100	108	996	10.0	10.0
1981	1,041	140	61	1,120	13.4	12.5
1982	809	162	37	934	20.0	17.3

Source: Shipments, compiled from data of the American Iron & Steel Institute; imports and exports, compiled from official statistics of the U.S. Department of Commerce.

Table 7.--Stainless steel sheet and strip: U.S. producers' shipments, imports for consumption, exports of domestically produced merchandise, and apparent U.S. consumption, 1978-82

Year	Shipments	Imports	Exports	Apparent consumption	Ratio of imports to--	
					Shipments	Consumption
	1,000 short tons				Percent	
1978	783	82	36	829	10.5	9.9
1979	874	62	52	884	7.1	7.0
1980	700	38	83	655	5.4	5.8
1981	759	72	44	787	9.5	9.1
1982	590	87	26	652	14.7	13.3

Source: Shipments, compiled from data of the American Iron & Steel Institute; imports and exports, compiled from official statistics of the U.S. Department of Commerce.

Table 8.--Stainless steel plate: U.S. producers' shipments, imports for consumption, exports of domestically produced merchandise, and apparent U.S. consumption, 1978-82

Year	Shipments	Imports	Exports	Apparent consumption	Ratio of imports to--	
					Shipments	Consumption
	1,000 short tons				Percent	
1978	114	11	5	120	9.6	9.2
1979	146	7	12	141	4.8	5.0
1980	124	3	16	111	2.4	2.7
1981	122	8	10	120	6.6	6.7
1982	98	13	5	106	13.3	12.3

Source: Shipments, compiled from data of the American Iron & Steel Institute; imports and exports, compiled from official statistics of the U.S. Department of Commerce.

Table 9.--Stainless steel bar: U.S. producers' shipments, imports for consumption, exports of domestically produced merchandise, and apparent U.S. consumption, 1978-82

Year	Shipments	Imports	Exports	Apparent consumption	Ratio of imports to--	
					Shipments	Consumption
	1,000 short tons				Percent	
1978	134	27	4	157	20.1	17.2
1979	154	29	5	178	18.8	16.3
1980	144	37	9	172	25.7	21.5
1981	129	35	7	157	27.1	22.3
1982	99	40	6	133	40.4	30.1

Source: Shipments, compiled from data of the American Iron & Steel Institute; imports and exports, compiled from official statistics of the U.S. Department of Commerce.

Table 10.--Stainless steel wire rod: U.S. producers' shipments, imports for consumption, exports of domestically produced merchandise, and apparent U.S. consumption, 1978-82

Year	Shipments	Imports	Exports	Apparent consumption	Ratio of imports to--	
					Shipments	Consumption
	1,000 short tons				Percent	
1978	28	18	1	45	64.3	40.0
1979	41	18	1/	59	43.9	30.5
1980	36	22	1	57	61.1	38.6
1981	31	25	1	55	80.6	45.5
1982	22	22	1/	44	100.0	50.0

1/ Less than 500 tons.

Source: Shipments, compiled from data of the American Iron & Steel Institute; imports and exports, compiled from official statistics of the U.S. Department of Commerce.

Table 11.--Alloy tool steel: U.S. producers' shipments, imports for consumption, exports of domestically produced merchandise, and apparent U.S. consumption, 1978-82

Year	Shipments	Imports	Exports	Apparent consumption	Ratio of imports to--	
					Shipments	Consumption
	1,000 short tons				Percent	
1978	92	25	5	112	27.2	22.3
1979	96	34	4	126	35.4	27.0
1980	79	30	3	106	38.0	28.3
1981	67	36	4	99	53.7	36.4
1982	45	40	2	83	88.9	48.2

Source: Shipments, compiled from data of the American Iron & Steel Institute; imports and exports, compiled from official statistics of the U.S. Department of Commerce.

Table 12.--Stainless steel and alloy tool steel: Percentage distribution of principal U.S. markets, by types, 1981

Market	Stainless steel						Tool steel
	Sheet	Strip	Plate	Hot-rolled bar	Cold-formed bar	Wire rod	
Service centers/distributors	52	25	51	51	66	13	14
Automotive	17	19	-	-	2	4	-
Construction	5	5	33	-	-	-	-
Electrical equipment	-	-	-	13	2	-	
Machinery, industrial equipment and tools	4	4	15	11	15	2/ 34	4
Other	22	1/ 47	1	25	15	3/ 49	4/ 82
Total	100	100	100	100	100	100	100

1/ Appliances, utensils, and cutlery together accounted for 17 percent of the total market share of stainless steel strip in 1981.

2/ Includes industrial fasteners, which accounted for 20 percent of shipments in 1981.

3/ Stainless steel wire rod for conversion into wire accounted for 42 percent of shipments in 1981.

4/ Nonclassified shipments accounted for 77 percent of tool steel shipments in 1981.

Source: American Iron & Steel Institute.

Table 13.--Stainless steel and alloy tool steel:U.S. imports for consumption, by principal sources, 1978-82

Quantity (short tons)

Commodity/Country	1978	1979	1980	1981	1982
Japan	71,835	67,254	47,708	41,949	42,588
Germany, West	15,111	10,942	7,868	31,612	40,205
France	15,866	14,524	15,146	21,258	31,065
Sweden	25,344	27,228	20,814	20,941	22,170
Spain	3,683	3,332	6,362	14,733	16,472
United Kingdom	6,185	4,651	3,487	9,775	11,857
Brazil	1,377	2,044	2,076	6,014	8,074
Canada	12,111	6,431	10,320	8,046	7,644
Korea, South	2,949	2,104	4,067	4,754	5,669
Italy	2,458	2,086	3,683	3,997	5,647
All other	5,657	9,834	8,237	13,031	11,155
Total	162,576	150,433	129,768	176,112	202,548

Value (1,000 dollars)

Commodity/Country	1978	1979	1980	1981	1982
Japan	114,347	115,487	102,713	82,746	78,787
Germany, West	21,047	15,003	12,660	51,396	70,178
France	22,456	22,219	28,180	42,333	51,698
Sweden	52,960	71,195	67,672	62,076	59,397
Spain	5,136	5,033	11,886	28,191	26,642
United Kingdom	10,737	8,821	8,612	22,923	23,273
Brazil	2,061	3,081	3,746	12,336	14,287
Canada	16,538	11,231	16,087	11,937	11,295
Korea, South	3,597	2,989	6,514	7,430	8,546
Italy	2,469	2,365	4,803	5,596	7,710
All other	8,103	15,966	19,942	26,022	21,603
Total	259,450	273,391	282,814	352,986	373,416

Table 13.--Stainless steel and alloy tool steel:U.S. imports for consumption, by principal sources, 1978-82--Continued

Unit value (per ton)

Commodity/Country	1978	1979	1980	1981	1982
Japan	1591.8084	1717.1663	2152.9332	1972.5187	1849.9682
Germany, West	1392.8125	1371.1402	1609.0163	1625.8444	1745.4817
France	1415.4076	1529.7456	1860.5887	1991.3760	1664.1695
Sweden	2089.6527	2614.7613	3251.2369	2964.3619	2679.1326
Spain	1394.2341	1510.4490	1868.4843	1913.3823	1617.3994
United Kingdom	1735.8758	1896.4974	2469.4203	2345.0499	1962.8770
Brazil	1496.9499	1507.3396	1804.4914	2051.1269	1769.4203
Canada	1365.5810	1746.4966	1558.8610	1483.4643	1477.4881
Korea, South	1219.5719	1420.4027	1601.6140	1562.7851	1507.6411
Italy	1004.2919	1133.5892	1304.0342	1400.2197	1365.3275
All other	1432.3652	1623.5517	2421.0927	1996.9072	1936.6122
Total	1595.8708	1817.3684	2179.3861	2004.3297	1843.5945

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

Table 14.--Stainless steel: U.S. imports for consumption, by principal sources, 1978-82

Quantity (short tons)

Commodity/Country	1978	1979	1980	1981	1982
Japan	67,300	61,813	40,308	38,136	37,475
Germany, West	11,750	5,918	3,653	19,684	30,298
France	15,573	13,217	13,953	20,516	29,498
Spain	3,374	3,072	6,231	14,591	16,042
Sweden	15,792	15,278	10,908	9,885	11,828
United Kingdom	4,724	2,497	2,086	8,689	10,271
Canada	9,801	4,140	8,714	7,417	6,206
Korea, South	2,949	2,104	4,037	4,751	5,338
Brazil	1,373	2,030	1,736	4,263	5,272
Italy	2,360	2,008	3,474	3,198	3,927
All other	2,962	4,546	4,779	8,742	6,336
Total	137,957	116,624	99,879	139,873	162,490

Value (1,000 dollars)

Commodity/Country	1978	1979	1980	1981	1982
Japan	101,012	103,142	78,378	71,819	66,200
Germany, West	16,598	9,026	6,739	35,774	52,345
France	21,552	19,691	24,902	38,652	48,266
Spain	4,874	4,798	11,712	27,949	26,061
Sweden	28,092	31,679	30,228	26,184	29,206
United Kingdom	7,356	4,222	4,372	18,239	18,157
Canada	11,546	6,047	12,847	10,470	8,975
Korea, South	3,597	2,989	6,491	7,418	8,056
Brazil	2,057	3,061	3,175	8,052	8,463
Italy	2,362	2,262	4,414	4,596	5,343
All other	4,226	7,161	10,982	16,009	10,632
Total	203,271	194,079	194,240	265,161	281,703

Table 14.--Stainless steel: U.S. imports for consumption, by principal sources, 1978-82
Continued

Unit value (per ton)

Commodity/Country	1978	1979	1980	1981	1982
Japan	1500.9343	1668.6046	1944.4603	1883.2601	1766.5150
Germany, West	1412.6430	1525.1757	1844.6403	1817.3923	1727.6353
France	1383.9191	1489.8030	1784.7475	1884.0008	1636.2522
Spain	1444.4475	1561.9870	1879.6281	1915.4545	1624.5027
Sweden	1778.9296	2073.4859	2771.2518	2648.8644	2469.1954
United Kingdom	1556.9410	1690.8717	2096.4717	2099.0571	1767.8033
Canada	1178.0513	1460.5816	1474.1874	1411.5524	1446.3508
Korea, South	1219.5719	1420.4027	1608.0489	1561.2008	1509.3040
Brazil	1497.7708	1508.1233	1828.9711	1888.6613	1605.3306
Italy	1001.0406	1126.3180	1270.5188	1437.1443	1360.5515
All other	1426.7727	1575.2405	2298.1095	1831.1443	1678.0681
Total	1473.4351	1664.1372	1944.7622	1895.7248	1733.6634

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

Table 15.--Stainless steel sheets and strip: U.S. imports for consumption, by principal sources, 1978-82

Quantity (short tons)

Commodity/Country	1978	1979	1980	1981	1982
France	9,134	7,689	6,187	13,805	21,529
Germany, West	8,579	3,846	306	15,489	19,906
Japan	40,541	35,738	15,927	15,281	13,885
Spain	0	15	96	5,003	8,387
Canada	8,529	2,473	6,868	6,514	5,340
Sweden	9,257	7,418	5,128	3,169	4,673
United Kingdom	1,166	1,284	896	4,091	4,454
Korea, South	2,468	1,354	66	3,062	3,006
Belgium and Luxembourg	312	71	1,188	1,484	2,552
Finland	1,196	1,416	1,690	3,592	1,924
All other	379	1,012	84	650	1,633
Total	81,560	62,316	38,436	72,141	87,288

Value (1,000 dollars)

Commodity/Country	1978	1979	1980	1981	1982
France	11,885	10,598	9,448	21,770	32,501
Germany, West	11,973	5,590	549	27,072	33,099
Japan	57,340	55,540	27,783	24,778	21,851
Spain	0	19	214	8,493	13,266
Canada	9,606	3,018	9,278	8,531	6,680
Sweden	17,678	17,509	17,579	11,555	13,833
United Kingdom	2,302	2,233	1,991	8,657	7,988
Korea, South	3,003	1,923	110	4,502	4,330
Belgium and Luxembourg	422	124	3,320	2,692	3,895
Finland	1,559	2,005	2,904	5,457	2,834
All other	525	1,305	192	788	2,038
Total	116,293	99,864	73,367	124,295	142,315

Table 15.--Stainless steel sheets and strip: U.S. imports for consumption, by principal sources, 1978-82--Continued

Commodity/Country	Unit value (per ton)				
	1978	1979	1980	1981	1982
France	1301.1616	1378.3553	1527.0555	1576.9366	1509.6207
Germany, West	1395.5561	1453.4203	1790.3942	1747.8163	1662.7640
Japan	1414.3756	1554.0892	1744.4594	1621.4659	1573.7574
Spain	.	1297.6593	2236.0979	1697.6405	1581.6693
Canada	1126.2809	1220.1955	1350.8882	1309.5787	1251.0297
Sweden	1909.7873	2360.3325	3427.9614	3646.3354	2960.4591
United Kingdom	1974.3071	1739.4282	2220.7686	2115.9730	1793.3721
Korea, South	1217.1241	1420.1502	1659.9447	1469.9328	1440.6656
Belgium and Luxembourg	1353.8793	1732.0820	2794.4867	1814.1227	1526.2021
Finland	1303.4324	1415.8519	1718.6584	1519.3765	1473.1934
All other	1384.9702	1289.1954	2277.5226	1212.8491	1248.2520
Average	1425.8569	1602.5231	1908.7977	1722.9494	1630.4143

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

Table 16.--Stainless steel plate: U.S. imports for consumption, by principal sources, 1978-82

Quantity (short tons)

Commodity/Country	1978	1979	1980	1981	1982
Germany, West	1,631	340	140	1,422	6,261
United Kingdom	2,679	610	273	2,985	3,607
Japan	5,467	4,114	1,325	803	1,505
Sweden	1,115	1,270	635	631	785
Canada	33	7	133	29	432
Spain	0	0	0	50	255
Republic of South Africa	335	622	112	152	173
France	75	0	0	1,469	141
Belgium and Luxembourg	0	34	352	110	70
Austria	3	8	1/	89	34
All other	73	27	5	11	5
Total	11,411	7,032	2,976	7,750	13,268

Value (1,000 dollars)

Commodity/Country	1978	1979	1980	1981	1982
Germany, West	2,310	610	273	3,377	12,243
United Kingdom	3,687	1,149	674	6,395	6,234
Japan	7,928	6,094	2,465	1,747	2,822
Sweden	2,062	3,074	1,799	1,863	2,177
Canada	25	19	215	90	1,210
Spain	0	0	0	105	368
Republic of South Africa	462	935	147	254	274
France	84	0	0	5,581	424
Belgium and Luxembourg	0	56	1,027	219	86
Austria	11	28	1/	391	285
All other	131	38	12	15	40
Total	16,699	12,004	6,613	20,038	26,162

1/ Less than $500.

Table 16.--Stainless steel plate: U.S. imports for consumption, by principal sources, 1978-82--Continued

Unit value (per ton)

Commodity/Country	1978	1979	1980	1981	1982
Germany, West	1415.6368	1792.9018	1946.9934	2375.1764	1955.2542
United Kingdom	1376.5533	1885.3285	2467.0348	2142.6429	1728.2783
Japan	1450.0896	1481.3441	1860.4382	2174.7188	1874.7024
Sweden	1849.7757	2420.1787	2831.1804	2950.8504	2774.4342
Canada	759.5411	2686.7487	1620.3545	3138.0650	2803.0595
Spain	.	.	.	2088.3637	1442.4893
Republic of South Africa	1379.6767	1503.0977	1309.4118	1672.1278	1584.7630
France	1120.3719	.	.	3799.1905	2999.7735
Belgium and Luxembourg	.	1668.9622	2918.7793	1993.3771	1231.5214
Austria	3436.2851	3617.1785	12476.1905	4406.9896	8498.0194
All other	1790.2196	1407.4170	2636.1340	1455.7689	7398.4252
Average	1463.4280	1707.1852	2222.3566	2585.4459	1971.8451

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

Table 17.--Stainless steel bar: U.S. imports for consumption, by principal sources, 1978-82

Quantity (short tons)

Commodity/Country	1978	1979	1980	1981	1982
Japan	15,591	15,343	16,782	14,471	17,471
Spain	3,368	3,057	4,462	6,776	5,021
Brazil	1,373	2,030	1,703	2,914	4,078
France	966	1,405	2,289	2,012	3,739
Germany, West	1,494	1,623	2,547	1,199	2,243
United Kingdom	880	580	915	1,613	2,163
Korea, South	456	751	3,885	1,654	2,072
Sweden	1,416	1,749	1,661	2,000	1,720
Italy	20	46	391	763	746
Canada	1,239	1,647	1,688	874	408
All other	472	639	500	571	392
Total	27,273	28,868	36,823	34,847	40,053

Value (1,000 dollars)

Commodity/Country	1978	1979	1980	1981	1982
Japan	27,124	30,521	36,788	32,141	33,830
Spain	4,863	4,779	8,707	14,537	8,660
Brazil	2,057	3,061	3,135	5,634	6,547
France	1,383	2,357	4,668	4,455	6,336
Germany, West	2,258	2,679	4,796	2,753	4,082
United Kingdom	1,367	802	1,702	3,185	3,822
Korea, South	553	1,066	6,257	2,869	3,338
Sweden	2,210	3,167	3,967	5,382	4,428
Italy	23	60	548	1,171	1,153
Canada	1,915	2,986	3,266	1,848	1,036
All other	662	918	1,042	1,337	784
Total	44,415	52,397	74,876	75,313	74,016

Table 17.--Stainless steel bar: U.S. imports for consumption, by principal sources, 1978-82--Continued

Commodity/Country	Unit value (per ton)				
	1978	1979	1980	1981	1982
Japan	1739.7983	1989.2483	2192.0493	2221.0988	1936.3007
Spain	1444.0648	1563.2652	1951.4514	2145.5184	1724.9445
Brazil	1497.7708	1508.1233	1840.7954	1933.4367	1605.3922
France	1432.2124	1677.5705	2039.1179	2214.2786	1694.6377
Germany, West	1511.8851	1650.8705	1882.8225	2295.4294	1820.1067
United Kingdom	1553.1250	1384.4288	1860.9543	1974.9288	1766.8178
Korea, South	1214.1861	1420.8581	1610.3447	1734.3326	1611.0979
Sweden	1561.0250	1810.5136	2387.9930	2691.5249	2573.6182
Italy	1165.4662	1317.8859	1400.2246	1534.0991	1544.1458
Canada	1545.6933	1813.5800	1935.5625	2114.9892	2541.9306
All other	1402.7395	1436.6266	2085.2873	2342.2066	2000.2219
Average	1628.5725	1815.0552	2033.3747	2161.2733	1847.9331

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

Table 18.--Stainless steel wire rod: U.S. imports for consumption, by principal sources, 1978-82

Quantity (short tons)

Commodity/Country	1978	1979	1980	1981	1982
Sweden	4,004	4,841	3,483	4,085	4,650
Japan	5,701	6,619	6,274	7,580	4,613
France	5,398	4,124	5,477	3,230	4,088
Spain	7	0	1,674	2,763	2,379
Italy	2,220	1,452	3,083	2,118	2,081
Germany, West	45	108	659	1,574	1,888
Brazil	0	0	13	1,349	1,140
Belgium and Luxembourg	312	1,228	867	2,403	676
Korea, South	26	0	86	34	260
United Kingdom	0	24	1	1/	47
All other	0	13	26	0	57
Total	17,714	18,408	21,643	25,136	21,881

1/ Less than 1,000 units.

Value (1,000 dollars)

Commodity/Country	1978	1979	1980	1981	1982
Sweden	6,142	7,929	6,883	7,384	8,768
Japan	8,620	10,987	11,342	13,153	7,697
France	8,200	6,737	10,786	6,847	9,005
Spain	11	0	2,791	4,814	3,767
Italy	2,211	1,621	3,866	3,011	2,796
Germany, West	58	146	1,120	2,572	2,921
Brazil	0	0	22	2,418	1,900
Belgium and Luxembourg	583	2,333	2,354	5,269	1,770
Korea, South	40	0	125	46	388
United Kingdom	0	37	6	1	113
All other	0	24	89	0	84
Total	25,864	29,814	39,384	45,516	39,209

Table 18.--Stainless steel wire rod: U.S. imports for consumption, by principal sources, 1978-82--Continued

Commodity/Country	Unit value (per ton)				
	1978	1979	1980	1981	1982
Sweden	1533.7638	1637.9660	1976.2061	1807.5902	1885.4560
Japan	1512.0088	1660.0224	1807.6393	1735.1968	1668.3432
France	1518.9738	1633.6383	1969.5520	2119.6763	2202.6037
Spain	1636.8115	.	1667.7194	1742.5049	1583.0622
Italy	995.5663	1116.4738	1254.0508	1421.6757	1343.9410
Germany, West	1269.1863	1348.8707	1700.4476	1633.9398	1546.9124
Brazil	.	.	1683.3258	1791.9495	1666.3096
Belgium and Luxembourg	1870.1489	1900.2228	2713.6266	2193.2127	2618.6914
Korea, South	1546.5307	.	1463.8108	1370.9430	1491.7551
United Kingdom	.	1553.1942	4065.7848	10152.4664	2426.8252
All other	.	1806.5368	3351.2716	.	1466.2506
Average	1460.0939	1619.6000	1819.7037	1810.7954	1791.9496

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

Table 19.--Alloy tool steel: U.S. imports for consumption, by principal sources, 1978-82

Quantity (short tons)

Commodity/Country	1978	1979	1980	1981	1982
Sweden	9,552	11,950	9,906	11,056	10,342
Germany, West	3,362	5,024	4,215	11,928	9,907
Japan	4,535	5,441	7,400	3,814	5,114
Austria	1,262	2,618	2,438	3,157	3,931
Brazil	4	14	340	1,751	2,803
Italy	99	78	209	799	1,720
United Kingdom	1,461	2,154	1,402	1,086	1,586
France	292	1,307	1,193	742	1,568
Canada	2,309	2,290	1,605	629	1,439
Spain	309	261	130	142	430
All other	1,434	2,671	1,051	1,135	1,219
Total	24,619	33,808	29,889	36,239	40,058

Value (1,000 dollars)

Commodity/Country	1978	1979	1980	1981	1982
Sweden	24,868	39,516	37,444	35,892	30,191
Germany, West	4,449	5,977	5,921	15,622	17,833
Japan	13,335	12,345	24,335	10,926	12,587
Austria	2,687	6,013	7,315	8,192	9,531
Brazil	4	20	571	4,285	5,824
Italy	107	103	389	1,001	2,368
United Kingdom	3,381	4,599	4,239	4,684	5,116
France	904	2,527	3,278	3,680	3,432
Canada	4,992	5,184	3,240	1,467	2,319
Spain	262	235	174	242	581
All other	1,191	2,793	1,668	1,833	1,930
Total	56,179	79,313	88,574	87,825	91,714

Table 19.--Alloy tool steel: U.S. imports for consumption, by principal sources, 1978-82--Continued

Commodity/Country	Unit value (per ton)				
	1978	1979	1980	1981	1982
Sweden	2603.3262	3306.7778	3779.7392	3246.4516	2919.2328
Germany, West	1323.4982	1189.7038	1404.8059	1309.7361	1800.0615
Japan	2940.3170	2268.8634	3288.4727	2865.0753	2461.5482
Austria	2129.5926	2296.8514	3000.5484	2595.1406	2424.4225
Brazil	1184.6516	1396.5745	1679.5442	2446.6259	2078.0353
Italy	1082.0753	1320.1840	1861.4556	1252.4645	1376.2292
United Kingdom	2314.5774	2134.8589	3024.3067	4313.0631	3226.4884
France	3092.4667	1933.6952	2747.6519	4961.0545	2189.4995
Canada	2161.4484	2263.3384	2018.5482	2330.9349	1611.7781
Spain	846.2651	902.7642	1335.5335	1700.7360	1352.3199
All other	830.4036	1045.7540	1587.4079	1615.4090	1583.4023
Average	2281.9725	2345.9520	2963.4088	2423.5210	2289.5123

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

Table 20.--Average number of production and related workers producing stainless steel and alloy tool steel, 1978-82

Year	Stainless steel					Alloy tool steel, all forms
	Sheet and strip	Plate	Bar	Wire rod	Total	
1978	8,029	1,744	3,840	487	14,100	3,337
1979	8,233	2,011	4,233	606	15,083	3,264
1980	6,929	1,874	4,309	572	13,684	3,060
1981	7,306	1,814	3,712	527	13,359	2,778
1982	6,531	1,542	2,816	425	11,314	2,009

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

Table 21.--Hours worked by production and related workers producing stainless steel and alloy tool steel, 1978-82

(In thousands of hours)

Year	Stainless steel					Alloy tool steel, all forms
	Sheets and strip	Plate	Bar	Wire rod	Total	
1978	16,296	3,666	8,143	1,245	29,350	6,231
1979	16,596	4,362	9,135	1,286	31,379	6,577
1980	12,581	3,748	8,870	1,169	26,368	6,116
1981	13,332	3,564	7,405	1,034	25,335	5,319
1982	9,830	2,740	5,163	758	18,491	3,338

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

Table 22.--Wages paid to production and related workers producing stainless steel and alloy tool steel, 1978-82

(In thousands of dollars)

Year	Stainless steel					Alloy tool steel, all forms
	Sheets and strip	Plate	Bar	Wire rod	Total	
1978	183,595	40,379	86,339	11,350	321,663	59,663
1979	208,198	53,161	108,399	16,112	385,870	69,499
1980	177,659	50,841	115,738	16,519	360,757	71,885
1981	208,001	52,710	107,114	15,768	383,593	69,696
1982	169,275	42,163	80,639	12,710	304,787	48,445

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

Table 23.--Total compensation paid to workers producing stainless steel and alloy tool steel, 1978-82

(In thousands of dollars)

Year	Stainless steel					Alloy tool steel, all forms
	Sheets and strip	Plate	Bar	Wire rod	Total	
1978	240,992	50,306	111,935	14,358	417,591	80,227
1979	265,076	66,000	140,418	20,482	491,976	94,462
1980	236,986	65,556	153,275	21,148	476,965	98,673
1981	281,456	69,432	144,412	20,532	515,832	97,884
1982	234,521	57,987	113,090	17,261	422,859	72,430

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

Table 24.--Stainless steel: Labor productivity, hourly compensation, and unit labor costs, 1978-82

Item	1978	1979	1980	1981	1982
Labor productivity:					
Tons per hour	0.0339	0.0348	0.0340	0.0371	0.0387
Percentage change	1/	2.7	-2.3	9.1	4.3
Hourly wages:					
Per hour	9.58	10.57	11.75	13.10	14.51
Percentage change	1/	10.3	11.2	11.5	10.8
Total compensation:					
Per hour	$12.88	$14.36	$16.13	$18.40	$21.70
Percentage change	1/	11.5	12.4	14.1	17.9
Unit labor costs:					
Per ton	$419.67	$451.11	$532.80	$548.36	$591.54
Percentage change	1/	7.5	18.1	2.9	7.9

1/ Not available.

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

Table 25.--Alloy tool steel: Labor productivity, hourly wages, total compensation, and unit labor costs, 1978-82

Item	1978	1979	1980	1981	1982
Labor productivity:					
Tons per hour	0.0156	0.0152	0.0148	0.0146	0.0134
Percentage change	1/	-2.6	-2.6	-1.4	-8.2
Hourly wages:					
Per hour	$10.96	$12.30	$13.68	$15.14	$16.48
Percentage change	1/	12.2	11.2	10.7	8.9
Total compensation:					
Per hour	$14.23	$15.68	$18.09	$20.36	$22.87
Percentage change	1/	10.2	15.4	12.6	12.3
Unit labor costs:					
Per ton	824.60	944.33	1,093.41	1,258.52	1,617.72
Percentage change	1/	14.5	15.8	15.1	28.5

1/ Not available.

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

Table 26.--Selected financial data of 22 U.S. producers 1/ on their stainless steel and alloy tool steel operations, 1978-82 2/

Item	1978	1979	1980	1981	1982
Net sales----------million dollars--	2,329	2,958	2,737	2,813	2,016
Cost of goods sold----------do----	1,981	2,478	2,384	2,494	1,916
Gross profit----------do----	348	480	353	319	100
General, selling, and administrative expenses---million dollars--	136	157	164	188	169
Operating profit or (loss)---do----	212	323	189	131	(69)
Other income or (expense) 3/ million dollars--	2	(15)	(15)	(23)	(25)
Net profit or (loss) before income taxes----------do----	214	308	174	108	(94)
Depreciation and amortization expense included above 4/ million dollars--	44	48	50	54	52
Cash flow (deficit) from operations 1/ 4/----------do----	258	356	224	162	(42)
Ratio to net sales of--					
Gross profit or (loss)--percent--	14.9	16.2	12.9	11.3	5.0
Operating profit or (loss) do----	9.1	10.9	6.9	4.7	(3.4)
Net profit or (loss) before income taxes----------percent--	9.2	10.4	6.4	3.8	(4.7)
Number of firms reporting operating losses----------	3	1	4	8	17
Number of firms report net losses----------	3	1	4	7	18

1/ * * * started production of alloy tool steel in 1980. Hence, 21 firms reported in 1978 and 1979 and 22 firms reporting in 1980-82, together accounting for 90 percent of U.S. producers' shipments in 1982.

2/ Al Tech reported data on its fiscal year ending Mar. 31 of 1978-80 and on a calender-year basis for 1981 and 1982. Washington, Braeburn and Eastern reported data on their fiscal year ending Feb. 28, June 30, and July 1, respectively. All other producers reported data on a calender-year basis.

3/ U.S. Steel and Jones & Laughlin did not provide interest expense and other income or expense for 1978-82.

4/ U.S. Steel and Jessop did not report depreciation expense for 1978-82. Hence, depreciation and amortization expense and cash flow or deficit from operations are somewhat understated.

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

Table 27.--Selected financial data of 14 U.S. producers on their overall stainless steel and/or stainless steel products operations, 1/ 1978-82 2/

Item	1978	1979	1980	1981	3/ 1982
Net sales---------million dollars--	1,995	2,555	2,346	2,451	1,785
Cost of goods sold----------do----	1,714	2,161	2,078	2,211	1,706
Gross profit----------do----	281	394	268	240	79
General selling, and administrative expenses---million dollars--	101	116	121	143	132
Operating profit or (loss)---do----	180	278	147	97	(53)
Other income or (expense) 4/ do----	2	(14)	(14)	(22)	(24)
Net profit or (loss) before income taxes----------do----	182	264	133	75	(77)
Depreciation and amortization expense included above 5/ million dollars--	38	42	43	47	45
Cash flow (deficit) from operations 5/----------do----	220	306	176	122	(32)
Ratio to net sales of:					
Gross profit or (loss)--percent--	14.1	15.4	11.4	9.8	4.4
Operating profit or (loss)-do----	9.0	10.9	6.3	4.0	(3.0)
Net profit or (loss) before income taxes----------percent--	9.1	10.3	5.7	3.1	(4.3)
Number of firms reporting operating losses----------	2	1	3	5	10
Number of firms reporting net losses----------	2	1	4	5	11

1/ 14 firms reporting, together accounting for 92 percent of U.S. shipments in 1982. Data reported in this table represent stainless steel operations only. Data presented in table 22 of the prehearing report included the total establishment operations (including carbon steel) of a few producers which resulted in substantially different figures.

2/ Al Tech reported data on its fiscal year ending Mar. 31 for 1978-80 and on a calender-year basis for 1981 and 1982. Washington and Eastern reported data on their fiscal year ending Feb. 28 and July 1, respectively. All other producers reported data on a calender-year basis.

3/ Crucible reported data for its Midland, Pa., plant for the first 3 months of 1982 because of its management decision to dispose of that plant.

4/ U.S. Steel and Jones & Laughlin did not provide interest expense and other income or (expense) data for 1978-82.

5/ U.S. Steel and Jessop did not report depreciation expense for 1978-82. Hence, depreciation and amortization expense and cash flows or (deficit) from operations are somewhat understated.

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

Table 28.--Selected financial data of 10 U.S. producers on their stainless steel sheet and strip operations, 1/ 1978-82 2/

Item	1978	1979	1980	1981	3/ 1982
Net sales---------million dollars--	1,099	1,393	1,203	1,313	966
Cost of goods sold----------do----	951	1,174	1,103	1,242	933
Gross profit----------do----	148	219	100	71	33
General selling, and administrative expenses---million dollars--	40	46	44	54	47
Operating profit or (loss)---do----	108	173	56	17	(14)
Interest expense----------do----					
Other income or (expense) 4/ million dollars--	2	(4)	(3)	(6)	(5)
Net profit or (loss) before income taxes----------	110	169	53	11	(19)
Depreciation and amortization expense included above 5/ million dollars--	23	24	25	27	22
Cash flow or (deficit) from operations 5/---million dollars--	133	193	78	38	3
Ratio to net sales of:					
Gross profit----------percent--	13.5	15.7	8.3	5.4	3.4
Operating profit or (loss)-do----	9.8	12.4	4.7	1.3	(1.4)
Net profit or (loss) before income taxes----------percent--	10.0	12.1	4.4	0.8	(2.0)
Number of firms reporting operating and net losses----------	1	1	3	4	5

1/ 10 firms reporting, together accounting for 85 percent of U.S. shipments in 1982.

2/ Washington and Eastern reported data on their fiscal year ending Feb. 28, and July 1, respectively. All other producers reported data on a calender-year basis.

3/ Crucible reported data for its Midland, Pa., plant for the first 3 months of 1982 because of its management decision to dispose operations of that plant.

4/ U.S. Steel and Jones & Laughlin did not report interest expense and other income or expenses for 1978-82.

5/ U.S. Steel did not report depreciation expense for 1978-82. Hence, depreciation and amortization expense and cash flow from operations are somewhat understated.

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

Table 29.--Selected financial data of 9 U.S. producers on their stainless steel plate operations, 1/ 1978-82 2/

Item	1978	1979	1980	1981	3/ 1982
Net sales---------1,000 dollars--	211,967	299,865	304,164	326,229	223,465
Cost of goods sold---------do-----	189,059	262,775	267,068	295,197	220,034
Gross profit----------	22,908	37,090	37,096	31,032	3,431
General, selling and administrative expenses------million dollars--	9,129	12,420	13,319	15,891	15,920
Operating profit or (loss)-do----	13,779	24,670	23,777	15,141	(12,489)
Other expense 4/----------do----	2,593	3,673	5,745	7,135	6,716
Net profit or (loss) before income taxes----------do----	11,186	20,997	18,032	8,006	(19,205)
Depreciation and amortization expense included above 5/ million dollars--	3,542	3,686	3,635	3,124	3,439
Cash flow or (deficit) from operations 5/----------do----	14,728	24,683	21,667	11,130	(15,766)
Ratio to net sales of:					
Gross profit----------percent--	10.8	12.4	12.2	9.5	1.5
Operating profit (loss)--do----	6.5	8.2	7.8	4.6	(5.6)
Net profit or (loss) before income taxes--------percent--	5.3	7.0	5.9	2.5	(8.6)
Number of firms reporting operating losses----------	1	0	1	2	5
Number of firms reporting net losses----------	2	0	2	2	6

1/ 9 firms reporting, together accounting for 97 percent of U.S. shipments in 1982.

2/ Washington and Eastern reported data on their fiscal year ending Feb. 28 and July 1, respectively. All other producers reported data on a calender-year basis.

3/ Crucible reported data for its Midland, Pa., plant for the first 3 months of 1982 because of its management decision to dispose operations of that plant.

4/ U.S. Steel and Jones & Laughlin did not provide interest expense and other income or expense for 1978-82.

5/ U.S. Steel and Jessup did not report depreciation expense for 1978-82. Hence, depreciation and amortization expense and cash flow or deficit from operations are somewhat understated.

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

Table 30.--Selected financial data of 8 U.S. producers on their stainless steel bar operations, 1/ 1978-82 2/

Item	1978	1979	1980	1981	1982
Net sales---------1,000 dollars--	376,700	483,065	519,364	494,930	365,526
Cost of goods sold---------do----	309,981	401,102	423,452	402,504	334,384
Gross profit----------do----	66,719	81,963	95,912	92,426	31,142
General, selling, and administrative expenses---1,000 dollars--	32,542	36,452	41,634	47,007	47,090
Operating profit or (loss)-do----	34,177	45,511	54,278	45,419	(15,948)
Interest expense----------do----	1,691	2,485	2,660	6,026	7,871
Other income----------do----	4,444	298	565	1,099	1,503
Net profit or (loss) before income taxes----1,000 dollars--	36,930	43,324	52,183	40,492	(22,316)
Depreciation and amortization expense included above 1,000 dollars--	6,907	8,728	9,012	10,202	12,239
Cash flow or (deficit) from operations----------do----	43,837	52,052	61,195	50,694	(10,077)
Ratio to net sales of:					
Gross profit----------percent--	17.7	17.0	18.5	18.7	8.5
Operating profit or (loss) do----	9.1	9.4	10.5	9.2	(4.4)
Net profit or (loss) before income taxes--------percent--	9.8	9.0	10.0	8.2	(6.1)
Number of firms reporting operating losses----------	3	1	3	3	6
Number of firms reporting net losses----------	3	1	4	3	6

1/ 8 firms reporting, together accounting for 92 percent of U.S. shipments in 1982.

2/ Al Tech reported data on its fiscal year ending Mar. 31 of 1978-80 and on a calender-year basis for 1981 and 1982. All other producers reported data on a calender-year basis.

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

Table 31.--Selected financial data of 5 U.S. producers 1/ on their stainless steel wire rod operations, 1978-82 2/

Item	1978	1979	1980	1981	1982
Net sales----------1,000 dollars--	53,193	74,447	69,605	62,785	43,444
Cost of goods sold----------do----	49,591	65,379	63,820	58,480	46,324
Gross profit or (loss)------do----	3,602	9,068	5,785	4,305	(2,880)
General, selling, and administrative expense-----1,000 dollars--	3,724	4,278	5,180	5,554	5,532
Operating profit or (loss)--do----	(122)	4,790	605	(1,249)	(8,412)
Interest expense----------do----	504	711	957	1,045	1,767
Other income----------do----	569	90	233	271	301
Net profit or (loss) before income taxes-----1,000 dollars--	(57)	4,169	(119)	(2,023)	(9,878)
Depreciation and amortization expense included above 1,000 dollars--	670	800	1,191	1,315	1,610
Cash flow or (deficit) from operations----------do----	613	4,969	1,072	(708)	(8,268)
Ratio to net sales of:					
Gross profit or (loss) percent--	6.8	12.2	8.3	6.9	(6.6)
Operating profit or (loss) do----	(0.2)	6.4	0.9	(2.0)	(19.4)
Net profit or (loss) before income taxes----------percent--	(0.1)	5.6	(0.2)	(3.2)	(22.7)
Number of firms reporting operating losses----------	3	2	3	3	4
Number of firms reporting net losses----------	2	2	3	3	4

1/ * * *. Hence, 5 firms reporting in 1978 and 1979 and 4 firms reporting in 1980-82, together accounting for 91 percent of U.S. producers' shipments in 1982.

2/ Al Tech reported data on its fiscal year ending Mar. 31 of 1978-80 and on a calender-year basis for 1981 and 1982. All other producers reported data on a calender-year basis.

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

Table 32.--Selected financial data of 15 U.S. producers 1/ on their alloy tool steel and/or alloy tool steel products operations, 1978-82 2/

Item	3/ 1978	1979	1980	1981	1982
Net sales----------1,000 dollars--	333,978	403,531	391,524	362,204	231,474
Cost of goods sold----------do-----	266,296	316,953	306,533	283,450	210,383
Gross profit----------do----	67,682	86,578	84,991	78,754	21,091
General, selling, and administrative expenses---1,000 dollars--	35,201	41,054	42,682	45,248	37,460
Operating profit or (loss) 1,000 dollars--	32,481	45,524	42,309	33,506	(16,369)
Other expense-----1,000 dollars--	(298)	(1,260)	(1,126)	(1,047)	(1,304)
Net profit or (loss) before income taxes----1,000 dollars--	32,183	44,264	41,183	32,459	(17,673)
Depreciation and amortization expense included above 4/ 1,000 dollars--	6,050	5,727	6,846	6,953	6,978
Cash flow or (deficit) from operations 4/ 1,000--dolloars--	38,233	49,991	48,029	39,412	(10,695)
Ratio to net sales of:					
Gross profit----------percent--	20.3	21.5	21.7	21.7	9.1
Operating profit or (loss) percent--	9.7	11.3	10.8	9.3	(7.1)
Net profit or (loss) before income taxes--------percent--	9.6	11.0	10.5	9.0	(7.6)
Number of firms reporting operating losses----------	3	1	3	5	11
Number of firms reporting net losses----------	3	1	3	4	11

1/ * * * started production of alloy tool steel in 1980. Hence, 13 firms reporting in 1978 and 1979 and 15 firms reporting in 1980-82, accounting for 92 percent of U.S. producers' shipments in 1982.

2/ Al Tech reported data on its fiscal year ending Mar. 31 of 1978-80 and on a calender-year basis for 1981 and 1982. Braeburn reported data on its fiscal year ending June 30. All other producers reported data on a calender year basis.

3/ * * *.

4/ Three firms in 1978 and 1979 and 4 firms in 1980-82 did not provide depreciation expense. Hence, depreciation expense and cash flow (deficit) from operations are understated.

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

Table 33.--Ratios of operating profit or (loss) to net sales for all manufacturing firms, all producers of durable goods, and producers of the stainless steel and alloy tool steel products subject to this investigation, 1978-82

Item	1978	1979	1980	1981	1982
All manufacturing firms 1/	8.1	7.7	6.8	6.8	2/ 5.4
Manufacturers of durable goods 1/	8.5	7.6	6.0	6.5	2/ 4.6
Overall corporate operations of steel producers 3/	5.1	4.4	2.7	4.7	4/
Overall steel operations 3/	5.0	4.1	2.0	4.1	4/
Stainless steel and alloy tool steel	9.1	10.9	6.9	4.7	(3.4)
Overall stainless steel	9.0	10.9	6.3	4.0	(3.0)
Stainless steel sheet and strip	9.8	12.4	4.7	1.3	(1.4)
Stainless steel plate	6.5	8.2	7.8	4.6	(5.6)
Stainless steel bar	9.1	9.4	10.5	9.2	(4.4)
Stainless steel wire rod	(.2)	6.4	.9	(2.0)	(19.4)
Alloy tool steel	9.7	11.3	10.8	9.3	(7.1)

1/ Derived from data published in the Federal Trade Commission's Quarterly Financial Report.

2/ Compiled from data of only 3 quarters of 1982. Fourth quarterly report is not yet published.

3/ Compiled from annual report and/or 10-K forms of 17 U.S. steel (carbon and specialty) producers.

4/ Not available.

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

Table 34.--Stainless steel and alloy tool steel: Effect of volume of shipments, price, and cost of production (increases) or decreases on gross profit between 1981 and 1982

Item	Stainless steel					Alloy tool steel, all forms	Total stainless steel and alloy tool steel 2/
	Sheets and strip	Plate	Bar	Wire rod	1/ Total		
Decrease or (increase) in U.S. producer's--							
Net sales							
million dollars	347.1	102.8	129.4	19.3	598.6	130.7	729.3
Costs of goods sold							
do	309.4	75.2	68.1	12.1	464.8	73.1	537.9
Gross profit---do	37.7	27.6	61.3	7.2	133.8	57.6	191.4
Shipments							
1,000 short tons	145.3	29.0	39.7	5.3	219.3	19.7	239.0
Average selling price per short ton	108.0	285.0	(109.0)	311.0	-	398.0	-
Average cost per short ton	65.0	74.0	(459.0)	(7.0)	-	(369.0)	-
Average gross profit per short ton	43.0	212.0	350.0	318.0	-	767.0	-
Decrease in gross profit attributable to--							
Volume---million dollars	15.7	7.1	26.2	0.9	49.9	24.7	74.6
Price---do	70.6	35.8	(15.3)	7.8	98.9	24.9	123.8
Cost of production---do	(42.5)	(9.2)	64.3	.2	12.8	23.1	35.9
Combined---do	(6.1)	(6.1)	(13.9)	(1.7)	(27.8)	(15.1)	(42.9)
Total decrease in gross profit---do	37.7	27.6	61.3	7.2	133.8	57.6	191.4

1/ Data do not equal those presented in table 27. That table included stainless steel products other than those subject to this investigation.

2/ Data do not equal those presented in table 26. That table included stainless steel and alloy tool steel products other than those subject to this investigation.

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

Table 35.--Investment in productive facilities by U.S. producers for their operations producing stainless steel and alloy tool steel, 1978-82

Item	1978	1979	1980	1981	1982
Stainless steel and alloy tool steel: 1/					
Original cost---1,000 dollars--	1,071,592	1,157,086	1,224,109	1,335,892	1,418,711
Book value----------do----	487,245	535,613	561,602	659,221	695,839
Ratio of operating profit or (loss) to--					
Original cost-------percent--	18.1	25.6	13.0	7.8	(4.1)
Book value----------do----	39.7	55.3	28.4	15.8	(8.4)
Stainless steel: 2/					
Original cost---1,000 dollars--	987,659	1,068,977	1,132,738	1,236,669	1,312,558
Book value----------do----	449,638	495,679	520,194	612,608	644,689
Ratio of operating profit or (loss) to--					
Original cost-------percent--	17.3	24.9	11.9	7.0	(3.3)
Book value----------do----	38.0	53.7	26.0	14.2	(6.7)
Stainless steel sheet and strip: 3/					
Original cost---1,000 dollars--	535,679	558,027	574,809	642,447	654,673
Book value----------do----	220,960	231,095	230,317	283,451	280,200
Ratio of operating profit or (loss) to--					
Original cost-------percent--	17.0	27.3	8.1	0.8	(3.1)
Book value----------do----	41.3	65.9	20.1	1.7	(7.3)
Stainless steel plate: 4/					
Original cost---1,000 dollars--	62,832	67,803	73,802	80,735	87,578
Book value----------do----	30,080	31,657	33,365	37,222	38,799
Ratio of operating profit or (loss) to--					
Original cost-------percent--	13.2	31.3	29.6	14.0	(9.8)
Book value----------do----	27.6	67.0	65.4	30.4	(22.1)
Stainless steel bar: 5/					
Original cost---1,000 dollars--	140,290	162,431	178,301	191,774	218,213
Book value----------do----	71,027	84,412	94,327	115,202	134,655
Ratio of operating porfit or (loss) to--					
Original cost-------percent--	24.9	27.2	28.0	23.8	5.7
Book value----------do----	49.1	52.3	53.0	39.7	9.3

See footnotes at end of table.

Table. 35--Investment in productive facilities by U.S. producers for thier operations producing stainless steel and alloy tool steel, 1978-82--Continued

Item	1978	1979	1980	1981	1982
Stainless steel wire rod: 6/					
Original cost---1,000 dollars--	25,196	28,839	37,582	42,550	61,014
Book value----------do----	11,925	14,406	20,002	24,013	37,057
Ratio of operating profit or (loss) to--					
Original cost-------percent--	0.4	11.1	2.2	(0.03)	(7.4)
Book value----------do----	0.8	22.3	4.2	(0.05)	(12.1)
Alloy tool steel: 7/					
Original cost---1,000 dollars--	83,933	88,109	91,371	99,223	106,153
Book value----------do----	37,607	39,934	41,408	46,613	51,150
Ratio of operating profit or (loss) to--					
Original cost-------percent--	25.0	32.3	26.1	17.6	(12.1)
Book value----------do----	55.8	71.2	57.5	37.4	(25.2)

1/ Data provided by 17 U.S. producers.
2/ Data provided by 12 U.S. producers.
3/ Data provided by 7 U.S. producers.
4/ Data provided by 6 U.S. producers.
5/ Data provided by 5 U.S. producers.
6/ Data provided by 2 U.S. producers.
7/ Data provided by 7 U.S. producers.

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

Table 36.--Specialty steel: Average prices of U.S. produced specialty steel, by product groupings, and by quarters, 1980-82

(Per ton)

Period	Stainless steel				Alloy tool steel bar 2/
	Sheet and strip 1/	Plate 1/	Bar 1/	Wire rod 2/	
1980:					
January-March	$1,891	$2,144	$2,597	$2,164	$5,455
April-June	1,848	2,118	2,782	2,287	5,455
July-September	1,796	2,160	2,781	2,265	5,607
October-December	1,755	2,152	2,775	2,235	5,704
1981:					
January-March	1,818	2,239	2,710	2,214	5,811
April-June	1,838	2,306	2,780	2,170	5,874
July-September	1,874	2,346	2,914	2,138	5,780
October-December	1,830	2,291	2,864	2,106	5,895
1982:					
January-March	1,737	1,950	2,825	2,021	5,693
April-June	1,669	2,058	2,846	1,980	5,754
July-September	1,678	2,079	2,765	1,829	5,653
October-December	1,604	2,079	2,504	1,754	5,571

1/ Sales to service centers/distributors.
2/ Sales to end users.

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

Table 37.--Stainless steel sheet and strip: Average selling prices of various specifications of U.S.-produced and imported stainless steel sheet for sales to service centers/distributors, by quarters, 1980-82

(Per ton)

Period	Grade 304 1/		Grade 304 2/		Grade 316 1/		Grade 430 3/	
	U.S.-produced	Imported	U.S.-produced	Imported	U.S.-produced	Imported	U.S.-produced	Imported
1980:								
Jan.-Mar	$1,759	$1,851	$1,952	4/	$3,898	4/	$1,754	$1,670
Apr.-June	1,718	4/	1,965	1,881	3,749	4/	1,768	1,696
July-Sept	1,667	4/	1,943	1,881	3,630	4/	1,752	1,746
Oct.-Dec	1,636	4/	1,969	1,891	3,396	4/	1,689	1,765
1981:								
Jan.-Mar	1,698	4/	1,961	1,859	3,479	3,147	1,800	1,889
Apr.-June	1,728	4/	1,993	2,023	3,399	2,969	1,765	1,738
July-Sept	1,775	1,807	2,082	1,908	3,173	2,788	1,869	1,579
Oct.-Dec	1,733	1,751	2,047	1,803	3,037	2,727	1,900	1,528
1982:								
Jan.-Mar	1,642	1,801	2,003	1,782	2,767	2,721	1,939	1,578
Apr.-June	1,580	1,718	1,998	1,791	2,600	2,580	1,829	1,547
July-Sept	1,607	1,660	1,832	1,772	2,501	5/	1,815	1,460
Oct.-Dec	1,539	1,642	1,778	1,688	2,417	2,453	1,618	1,526

1/ Cold-rolled, 2B finish, 16 gage in thickness, 36-inch exact through 48-inch exact in width, and coiled.

2/ Cold-rolled, 2B finish, 16 gage in thickness, 60-inch in width, and coiled.

3/ Cold-rolled, BA finish, 20 gage in thickness, 36-inch exact through 48-inch exact in width, and coiled.

4/ Not available.

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

Table 38.--Stainless steel plate: Average selling prices of various specifications of U.S.-produced and imported stainless steel plate for sales to service centers/distributors, by quarters, 1980-82

(Per ton)

Period	Grade 304 1/		Grade 304 2/		Grade 316L 2/	
	U.S. produced	Imported	U.S. produced	Imported	U.S. produced	Imported
1980:						
January-March	$1,897	$1,690	$1,913	$1,773	$3,445	$3,740
April-June	1,853	3/	1,953	1,773	3,226	3/
July-September	1,884	3/	1,924	3/	3,539	3/
October-December	1,884	1,760	1,947	1,855	3,410	2,880
1981:						
January-March	1,963	1,725	2,019	1,915	3,562	2,840
April-June	2,038	1,740	2,074	1,915	3,657	2,830
July-September	2,080	1,780	2,106	1,875	3,715	2,950
October-December	2,023	1,716	2,077	1,900	3,574	3,020
1982:						
January-March	1,950	1,660	1,552	1,835	3,346	2,945
April-June	1,912	1,680	1,774	1,822	3,345	2,795
July-September	1,862	1,690	1,917	1,821	3,083	2,836
October-December	1,848	1,680	1,913	1,888	3,124	2,838

1/ Hot-rolled, annealed and pickled, 1/2-inch thick, 72-inch exact through 96-inch exact in width, 240-inch to 290-inch long, cut to length.

2/ Hot-rolled, annealed and pickled, 1/4-inch thick, 72-inch exact through 96-inch exact in width, 240-inch to 290-inch long, cut to length.

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

Table 39.--Stainless steel bar: Average selling prices of various specifications of U.S.-produced and imported stainless steel bar for sales to service centers/distributors, by quarters, 1980-82

(Per ton)

Period	Cold-formed, grade 303 1/		Cold-formed, grade 304 2/		Hot-rolled, grade 304 3/	
	U.S.-produced	Imported	U.S.-produced	Imported	U.S.-produced	Imported
1980:						
Jan.-Mar	$2,883	4/	$2,537	$2,850	$2,317	$3,107
Apr.-June	3,053	2,580	2,721	2,898	2,543	3,227
July-Sept	3,098	2,337	2,703	2,817	2,526	3,173
Oct.-Dec	3,101	4/	2,710	2,796	2,447	3,187
1981:						
Jan.-Mar	2,923	2,359	2,670	2,625	2,489	2,416
Apr.-June	2,948	2,375	2,757	2,575	2,560	2,302
July-Sept	3,096	2,483	2,874	2,514	2,751	2,224
Oct.-Dec	3,093	2,505	2,806	2,513	2,700	2,104
1982:						
Jan.-Mar	3,059	2,524	2,767	2,485	2,647	2,264
Apr.-June	3,097	2,471	2,734	2,429	2,708	2,097
July-Sept	2,870	2,352	2,810	2,223	2,616	1,985
Oct.-Dec	2,650	2,182	2,404	2,138	2,458	1,938

1/ Centerless ground, 20/32-inch to 31/32-inch round, random length.
2/ Centerless ground, 1-1/2-inch to 4-3/4-inch round, random length.
3/ 1-1/2-inch to 4-3/4-inch round, random length.
4/ Not available.

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

Table 40.--Stainless steel wire rod: Average selling prices of U.S.-produced and imported stainless steel wire rod for sales to end users, by quarters, 1980-82

(Per ton)

Period	Grade 302 and/or 304 1/	
	U.S.-produced	Imported
1980:		
January-March	2,164	1,980
April-June	2,287	2,054
July-September	2,265	2,079
October-December	2,235	2,103
1981:		
January-March	2,214	2,066
April-June	2,170	2,090
July-September	2,138	1,980
October-December	2,106	1,914
1982:		
January-March	2,021	1,893
April-June	1,980	1,775
July-September	1,829	1,689
October-December	1,754	1,655

1/ 0.217-inch to 0.25-inch round.

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

Table 41.--Alloy tool steel: Average selling prices of various specifications of U.S.-produced and imported alloy tool steel for sales to end users, by quarters, 1980-82

(Per ton)

Period	Hot work, grade H-13 1/		High-speed, grade M-2 2/		Cold-work, grade D-2 3/	
	U.S.-produced	Imported	U.S.-produced	Imported	U.S.-produced	Imported
1980:						
January-March	3,154	4/	8,041	8,296	4,603	4/
April-June	3,189	4/	8,095	8,144	4,331	4/
July-September	3,075	4/	8,379	8,470	4,888	4/
October-December	3,122	3,124	8,557	8,330	5,145	4/
1981:						
January-March	3,335	3,242	8,610	8,480	4,844	3,709
April-June	3,329	3,137	8,546	8,219	5,492	3,739
July-September	3,305	3,419	8,424	8,026	5,272	3,572
October-December	3,229	3,345	8,256	7,753	5,821	4/
1982:						
January-March	3,408	3,251	8,269	7,801	4,818	3,898
April-June	3,208	2,895	8,223	7,692	5,985	3,754
July-September	3,210	2,935	8,226	7,691	5,263	3,782
October-December	3,254	2,973	7,984	7,613	5,281	3,886

1/ Hot-rolled or forged, annealed, rough turned, 3-1/8-inch to 5-1/16-inch round, random length.

2/ Centerless ground or rough turned, 1-13/16-inch to 3-inch round, random length.

3/ Hot-rolled or forged, annealed, rough turned, 4-1/16-inch to 6-inch round, random length.

4/ Not available.

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

Table 42.--Unit labor costs of production for specialty steel products, and and percentage changes from the previous year, by years, 1979-82

Year	Stainless steel 1/								Tool steel 2/	
	Sheet and strip		Plate		Bar		Wire rod			
	Unit cost	Percentage change	Unit cost	Percentage change	Unit cost	Percentage change	Unit cost	Percentage change	Unit cost	Percentage change
	Per ton		Per ton		Per ton		Per ton		Per ton	
1978	$347	3/	$396	3/	$746	3/	$552	3/	$810	3/
1979	357	3	462	17	812	9	602	9	976	14
1980	411	15	516	12	940	16	729	21	1,073	16
1981	433	5	564	9	1,010	7	790	8	1,224	14
1982	463	7	604	7	1,203	19	908	15	1,541	26

1/ For stainless steel products, total labor costs accounted for 25 percent of sheet and strip costs of production in 1981. The corresponding share for plate is 26 percent; bar, 34 percent; and wire rod, 37 percent.

2/ Total labor costs accounted for 34 percent of tool steel costs of production in 1981.

3/ Not available.

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

Table 43.--Costs of production, specialty steel: Price indexes for stainless steel scrap, chrome charge, new scrap nickel, fuel and power, and coal, by years, 1978-82

(1979=100)

Year	Stainless bundles (scrap)	Chrome charge	New scrap nickel	Fuel and power	Coal
1979	100	100	100	100	100
1980	107	107	114	141	104
1981	106	108	94	170	110
1982	85	108	72	170	119

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

Table 44.--Indexes of nominal exchange rates for currencies of the major foreign suppliers of specialty steel to the United States, by quarters, 1978-82

(January-March 1978=100)

Period	Japan	West Germany	France	Spain	United Kingdom	Canada	Sweden	Brazil	U.S. effective exchange rate 1/
1978:									
Jan.-Mar---	100	100	100	100	100	100	100	100	100
Apr.-June--	93	100	98	100	106	102	100	106	103
July-Sept--	81	97	93	94	100	103	96	113	104
Oct.-Dec---	80	90	91	88	98	106	94	121	107
1979:									
Jan.-Mar---	84	89	91	86	96	107	94	134	108
Apr.-June--	92	91	93	83	92	105	94	150	113
July-Sept--	92	88	90	82	87	105	91	166	116
Oct.-Dec---	100	85	88	83	88	105	91	207	120
1980:									
Jan.-Mar---	103	85	88	84	85	105	91	274	125
Apr.-June--	98	87	90	88	85	105	92	304	128
July-Sept--	92	86	88	90	81	105	89	334	132
Oct.-Dec---	89	92	94	95	81	106	93	374	135
1981:									
Jan.-Mar---	87	100	103	105	83	107	98	432	139
Apr.-June--	92	110	115	113	92	108	105	512	142
July-Sept--	97	117	124	122	104	109	114	608	143
Oct.-Dec---	95	108	120	119	102	107	119	720	143
1982:									
Jan.-Mar---	98	113	127	126	104	109	124	841	145
Apr.-June--	103	114	134	132	108	112	127	977	145
July-Sept--	107	119	148	140	112	113	133	1,157	146
Oct.-Dec---	109	120	150	149	117	111	158	1,317	146

1/ This is the index of a weighted average exchange rate of twenty major currencies relative to the U.S. dollar.

Source: International Monetary Fund.

Table 45.--Indexes of real exchange rates for currencies of the major foreign suppliers of specialty steel to the United States, by quarters, 1978-82

(January-March 1978=100)

Period	Japan	West Germany	France	Spain	United Kingdom	Canada	Sweden	Brazil
1978:								
Jan.-Mar---	100	100	100	100	100	100	100	100
Apr.-June--	96	102	98	98	107	102	101	98
July-Sept--	86	100	93	93	100	102	97	98
Oct.-Dec---	88	95	90	87	100	105	96	99
1979:								
Jan.-Mar---	92	94	88	80	98	103	94	92
Apr.-June--	100	98	90	78	93	100	95	104
July-Sept--	99	96	87	76	85	100	90	103
Oct.-Dec---	108	95	87	77	88	102	91	110
1980:								
Jan.-Mar---	107	96	88	76	83	100	90	128
Apr.-June--	100	99	90	79	80	102	91	120
July-Sept--	97	100	91	80	78	102	90	110
Oct.-Dec---	95	107	96	84	78	102	91	102
1981:								
Jan.-Mar---	96	118	107	66	80	103	98	100
Apr.-June--	104	129	117	98	90	105	105	102
July-Sept--	109	135	121	102	100	104	112	106
Oct.-Dec---	106	124	115	98	95	101	112	108
1982:								
Jan.-Mar---	111	128	120	101	95	102	113	108
Apr.-June--	116	129	123	1/	98	104	115	104
July-Sept--	123	134	134	1/	100	104	119	105
Oct.-Dec---	123	134	135	1/	105	101	140	109

1/ Wholesale price indexes were not available for these periods; therefore, real exchange rates could not be calculated.

Source: Compiled from data of the International Monetary Fund.

Table 46.--Correlations between quarterly exchange rate changes and quarterly changes in U.S. imports (1980-82), and U.S. exports (1978-82) of specialty steel 1/

Product line	Imports	Exports
Sheet and strip	2/ .73	2/ -0.57
Plate	2/ .84	2/ -.40
Bar	.41	-.05
Wire rod	.04	-.13
Tool steel	2/ .74	2/ -.54
Total	2/ .75	2/ -.58

1/ For imports of specialty steel the correlation is run only from 1980 to 1982 because of the quota in effect from 1976 to early 1980.

2/ Statistically significant at at least the 90 percent confidence level.

Source: The above correlations were computed from import and export data from the U.S. Department of Commerce, and foreign exchange-rate data, from the International Monetary System.

APPENDIX F

SELECTED STAINLESS STEEL BAR AND WIRE ROD STATISTICS

Table A.--Stainless steel bar and wire rod: Selected combined statistics, 1978-82

Item	1978	1979	1980	1981	1982
Imports----------1,000 tons--	45	47	59	60	62
Ratio of imports to--					
production----------percent--	25.6	22.7	30.7	35.5	54.9
Production----------1,000 tons--	176	207	192	169	113
Capacity----------do----	273	278	277	277	279
Utilization----------percent--	64.5	74.5	69.3	61.0	40.5
Producers' shipments-1,000 tons--	162	195	180	160	121
Exports----------do----	5	5	10	8	6
Producers' inventories-----do----	41	42	48	52	44
Importers' inventories-----do----	7	6	9	9	6
Consumption----------do----	202	237	229	212	177
Ratio of imports to--					
consumption---------percent--	22.3	19.8	25.8	28.3	35.0
Ratio of operating profit or					
(loss) to net sales-percent--	7.9	9.0	9.3	7.9	(5.9)

Source: Compiled from official statistics of the U.S. Department of Commerce and from data submitted in response to questionnaires of the U.S. International Trade Commission.