

PIG IRON FROM BRAZIL

**Determination of Material Injury
in Investigation No. 701-TA-2 (Final)
Under Section 705(b) of the
Tariff Act of 1930, Together
With the Information
Obtained in the Investigation**



**USITC PUBLICATION 1048
MARCH 1980**

UNITED STATES INTERNATIONAL TRADE COMMISSION

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Paula Stern
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NEWS

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USITC MAKES FINAL DETERMINATION ON COUNTERVAILING DUTY INVESTIGATION ON IMPORTS OF PIG IRON FROM BRAZIL

The United States International Trade Commission today determined under section 705(b) of the Tariff Act of 1930 that an industry in the United States is materially injured, by reason of subsidized imports of pig iron from Brazil. By virtue of this affirmative determination by the Commission, the U.S. Customs Service will assess countervailing duties as appropriate.

Voting in the affirmative were Chairman Catherine Bedell, Vice Chairman Bill Alberger, and Commissioners George M. Moore, Paula Stern, and Michael J. Calhoun.

The investigation is a transition case in that an earlier Commission investigation, underway on the effective date of the new law (January 1, 1980), was terminated and this investigation was instituted.

The Commission's public report, Pig Iron From Brazil (USITC Publication 1048) contains the views of the Commissioners and information developed during the final investigation (No. 701-TA-2). Copies may be obtained by calling (202) 523-5178, from the Office of the Secretary, 701 E Street NW., Washington, D.C. 20436, or from the Commission's New York Office, 6 World Trade Center, Suite 655, New York, N.Y., 10048, telephone (212) 466-5599.

more

FACTUAL HIGHLIGHTS

Pig Iron From Brazil USITC Inv. No. 701-TA-2 (Final)

Status of Proceedings:

1. Petition Filed--November 20, 1978
2. Petitioners--Ad Hoc Committee of Merchant Pig Iron Producers of America
3. Date Investigation Instituted by USITC--December 3, 1979
4. Public Hearing (date, time, and location)--February 6, 1980, at 10 a.m., in Washington D.C., USITC hearing room.

U.S. Industry:

1. Number of Producers--Six
2. Location of Producers--Lackawanna, NY; Chicago, Ill.; Pittsburgh, PA; Birmingham, Ala.; Portsmouth, Ohio; Geneva, Utah.
3. Types of Products--Cold merchant pig iron.
4. Employment--956 production workers for cold pig iron.
5. Estimated Value of Producers' Shipments (1979)--Cold merchant pig iron: \$138 million.
6. Estimated Value of Apparent U.S. Consumption (1979)--Cold merchant pig iron \$200 million.

U.S. Imports:

1. Value of Imports--\$45 million in 1977; \$72 million in 1978; \$63 million in 1979.
2. Major Source of Imports--Canada: \$29 million and 45 percent in 1979; Brazil: \$22 million and 34 percent in 1979.
3. Imports from Brazil as Percent of Estimated U.S. Apparent Consumption of cold merchant pig iron on a Quantity Basis: 17.2 percent in 1979.

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UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C.

Investigation No. 701-TA-2 (Final)

PIG IRON FROM BRAZIL

Determination

On the basis of the record 1/ in investigation No. 701-TA-2 (Final), the Commission unanimously determined, pursuant to section 705(b) of the Tariff Act of 1930 (19 U.S.C. 1671d(b)), that an industry in the United States is materially injured by reason of the importation of pig iron (provided for in item 606.13 of the Tariff Schedules of the United States) from Brazil upon which the administering authority determined that subsidies are being paid by the Government of Brazil.

Background

The Commission received advice from Treasury on November 20, 1979, regarding the bounty or grant being paid with respect to pig iron and thereafter instituted an investigation (No. 303-TA-12) under section 303(b) of the Tariff Act of 1930, as effective at that time. Because that investigation had not been completed at the time the new countervailing duty provisions became effective (Jan. 1, 1980), the investigation was terminated and reinstituted as investigation No. 701-TA-2 (Final) pursuant to section 102 of the Trade Agreements Act of 1979.

Notice of the termination of the earlier investigation and institution of the new investigation and of the public hearing to be held in connection therewith was duly given by posting copies of the notice at the Office of the

1/ The "record" is defined in sec. 207.2(j) of the Commission's Rules of Practice and Procedure (19 CFR 207.2(j)).

Secretary, U.S. International Trade Commission, Washington, D.C., and at the Commission's office in New York City, and by publishing the notice in the Federal Register of January 17, 1980 (45 F.R. 3402). The hearing was held in Washington, D.C. on February 6, 1980; all persons requesting the opportunity to appear were permitted to do so in person or by counsel.

VIEWS OF COMMISSIONERS ALBERGER, STERN AND CALHOUN

In order for the Commission to reach an affirmative determination in this investigation, pursuant to Section 705(b) of the Tariff Act of 1930 (19 U.S.C. 1671d(b)), it is necessary to find that an industry in the United States is materially injured or threatened with material injury, or that the establishment of an industry in the United States is materially retarded by reason of imports of pig iron from Brazil with respect to which the Department of the Treasury (Treasury) has found a subsidy is being provided.^{1/}

The Domestic Industry

For the purposes of this investigation, we consider the relevant industry to be those facilities in the United States producing cold pig iron.

Section 771(4) of the Tariff Act of 1930 (19 U.S.C. 1677(4)) provides, in part, as follows:

"(A) In General.--The term 'industry' means the domestic producers as a whole of a like product, or those producers whose collective output of the like product constitutes a major proportion of the total domestic production of that product."

^{1/} The Treasury Department found that subsidies to Brazilian producers of pig iron averaged 24.5 percent. The Commerce Department later revised this figure to 21.2. After Brazil began to phase out most of these subsidies, benefits were calculated to average 6.07 percent after December 7, 1979. These subsidies were calculated for 16 individual firms and range from 2.85 percent to 15.42 percent. See Commission Report, pp. A-2, A-3.

"(D) Product Lines.--The effect of subsidized or dumped imports shall be assessed in relation to the United States production of a like product if available data permit the separate identification of production in terms of such criteria as the production process or the producer's profits. If the domestic production of the like product has no separate identity in terms of such criteria, then the effect of the subsidized or dumped imports shall be assessed by the examination of the production of the narrowest group or range of products, which includes a like product, for which the necessary information can be provided."

Section 771(10) (19 U.S.C. 1677(10)) provides that:

"The term 'like product' means a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation under this title."

Although production methods for hot and cold pig iron are very similar and the same facilities may be used for both, cold pig iron satisfies a different type of demand. Over 96 percent of U.S. hot pig iron is used in captive steelmaking, the remainder primarily being used in the production of cast-iron products. Cold pig iron is also used in the production of cast-iron products and thus might be considered competitive with hot pig iron in this category.

However, cold pig iron can be transported over long distances, unlike hot pig iron which is transferred in its molten state to nearby customers. In the United States, most producers of cold pig iron also produce hot pig iron for use in their own steelmaking operations, while their cold pig iron production is sold on a regular basis to others (the merchant market). These producers serve seven regional markets in the United States, making use of separate and distinct marketing and

distribution channels, as well as storage facilities not required in the market for hot pig iron.

Data gathered by the Commission shows that while shipments of cold pig iron have declined over the course of the last ten years, shipments of hot metal merchant pig iron have remained relatively stable. These trends indicate that, as a matter of strategy, producers have not shifted resources back and forth between hot and cold production.

Six firms constitute the domestic cold pig iron industry. Their cold pig iron production is generally sold to cast iron foundries for the making of iron castings such as engine blocks, other cast-iron auto parts, and soil pipe. During the period under investigation by the Commission, U.S. Steel and Interlake, among the most diversified pig-iron producers, closed major plants in September 1978 and December 1979, respectively. Early this year, a third firm, Cyclops, announced its plans to close down its cold pig iron plant by June 1980.

Cold pig iron is the smallest segment of the total pig iron market and the only portion which has been directly impacted by imports. All imports from Brazil are cold pig iron.

Conditions of Trade and Development in the Industry

The Commission's investigation of conditions of trade and development in the industry indicates that domestic producers of cold pig iron faced difficulties from a variety of sources. Weakness in demand was

evident as apparent U.S. consumption continued in its long-term decline from 2.9 million short tons in 1968 to just over one million short tons in 1979. From 1977-1979 apparent consumption declined by about 200,000 short tons. This trend was reinforced by the increasing substitution of scrap iron, which is usually cheaper, for pig iron in the raw material mix used by foundries in making cast-iron products. In addition, cost of goods sold has risen from 87.1 percent of sales in 1977 to 92.4 percent in 1979.

During this period the industry lost market share to total imports. Although in absolute terms, imports remained relatively stable, domestic production declined by 17 percent, from 936,000 short tons in 1977 to 782,000 short tons in 1979, and U.S. sales followed a similar pattern, dropping 15 percent in value in 1979 below their 1977 level. Total imports share of the domestic market thus increased from 29.3 percent in 1977 to 44.5 percent in 1979.

Antiquated machinery was the major reason for shutting down at least one of the two large plants that closed during the period. Taking both closures into account, employment in the industry declined by 37.1 percent from 1977-1979. With reduced capacity, capacity utilization reversed an earlier downward trend, increasing by eleven percentage points and productivity increased by 14.6 percent. Figures adjusted for plant closures revealed that inventory levels were up 125 percent in 1979 over 1977 levels.

Material Injury by Reason of the Subsidized Imports

The law requires the Commission to determine whether a domestic industry in the United States is materially injured by reason of imports of the subsidized product.^{2/}

In finding material injury, the Commission must attempt to distinguish between the role of imports and that of other factors in order to assess whether such injury is by reason of subsidized imports. However, the law does not intend that imports and other factors be weighed one against the other. Rather, it is contemplated that the Commission carefully examine whether or not subsidized imports account for material injury to the domestic industry.^{3/}

In examining the role of imports, the Commission considers all relevant economic data, including the criteria set out in Section 771 of the Tariff Act of 1930: volume of imports, their effect on U.S. prices and the impact of imports on the industry.

The volume of imports of the subsidized merchandise from Brazil increased significantly over the period. These imports jumped by 45 percent from 127,000 short tons in 1977 to 184,000 short tons in 1979. This trend was part of a longer period of increasing market penetration by Brazilian pig iron, which peaked in 1978 at approximately 650 percent

^{2/} Tariff Act of 1930, Section 705(b).

^{3/} See House Report, p. 47.

of the quantity of imports entered into the United States in 1975. In absolute terms, imports from Brazil dropped slightly during 1979 after the filing of the countervailing duty petition in November 1978.

This increase in imports from Brazil can be contrasted with the rather flat trend registered for absolute quantities of imports from all sources from 1975 to 1979. Brazil thus increased its share of the total import market from five percent in 1975 to 39 percent in 1979 in terms of quantity. From 1977 to 1979 the increase was 34 to 39 percent. Since U.S. consumption was declining during this period, imports from Brazil were displacing both domestic products and other imports. Imports from Brazil increased as a percentage of consumption from 1.9 percent in 1975 to 17.2 percent in 1979. From 1977 to 1979, imports from Brazil almost doubled their share of consumption.

When this growth by Brazilian imports in a declining market is viewed in conjunction with pricing data analyzed by the Commission, it indicates that price suppression and in some cases, price depression did occur. The Commission found that during the entire period from 1977 to 1979, the margin by which Brazilian cold pig iron undersold the domestic product averaged from \$40 to \$50 per short ton, narrowing appreciably only during the last two quarters of 1979. This pricing strategy gave Brazilians approximately a twenty percent price advantage over domestic producers. The subsidies found by Treasury and revised by Commerce account for a significant proportion of the margins of underselling.

Prices for domestically produced products have risen only slightly since 1975;^{4/} in fact, discounting has been a frequent practice. By contrast, the wholesale price index has risen over forty percent and prices for foundry forge products, for which cold pig iron is an input, have risen nearly fifty percent.

Coupled with rising costs of production and decreasing market share of a shrinking market, U.S. cold pig iron producers have experienced a profit squeeze. Data submitted by producers representing 75 percent of sales show that net profits dropped by 70 percent. As a share of net sales, net operating profits fell sharply from 9.3 percent in 1977 to a loss of 1.5 percent in 1978, when plant closures occurred. Although the industry managed to improve its performance slightly in 1979, net profits remained at a significantly low level, only 3.4 percent of net sales.

The Commission was able to confirm claims by domestic producers of sales lost to Brazilian imports. Although declining in each year of the investigation, sales lost were of significant value. A purchaser's survey conducted by the Commission places prime importance on price of Brazilian pig iron in making purchasing decisions.

Conclusion

The Commission's investigation produced information which showed (1) that imports of cold pig iron entering the United States from Brazil

^{4/} See Hearing Transcript, p. 20.

have increased in a significant way; and (2) that these imports are a cause of material injury to the domestic industry, having produced price suppression and contributed significantly to low profitability in the industry.

Findings of Fact

The conclusion that domestic producers of cold merchant pig iron are materially injured by reason of subsidized Brazilian imports of pig iron is based on consideration of the economic factors required by Section 771(7) of the Tariff Act of 1930 (19 U.S.C. 1677(4)). The findings of fact are:

A. Volume of imports

1. Total U.S. imports of pig iron, most, if not all, of which are cold merchant pig iron, increased 37 percent from 1975 to 1978, from 478,000 short tons to 655,000 short tons. Imports dropped 27 percent in 1979 to 476,000 short tons. (Report at A-22; Table 8)

2. Imports from Brazil increased from 26,000 short tons or 5 percent of total imports in 1975 to 198,000 short tons or 30 percent of the total in 1978 and then decreased to 184,000 short tons or 39 percent of the total in 1979. (Report at A-22; Table 8)

B. Effect of imports on United States prices

3. Pig iron from Brazil undersells domestic pig iron by a significant margin during almost the entire period of 1977-79. In dollar terms, these margins averaged from \$40 to \$50 per short ton. Only in the last two quarters of 1979 did margins narrow appreciably, and only then in certain market areas. Margins of underselling did vary from one market area to another. (Report at A-39-43)

4. Merchant pig iron prices increased only 16 percent during the

1975-79 period. (Report at A-47; Table 24) An attempt to increase domestic published prices in 1978 was rescinded and the reason alleged was low priced imports from Brazil. (Report at A-45)

5. Discounts in the range of 5 to 15 percent from published prices have been and are currently the rule rather than the exception. (Report at A-48)

6. According to domestic producers' cost data, input prices increased from Dec. 1975 to Dec. 1979 as follows: iron ore - 39 percent; limestone - 16 percent; coke - 30 percent; fuel (oil) - 72 percent; labor - 55 percent. (Report at A-45)

C. Impact on affected industry

7. Production of cold merchant pig iron declined from 935.5 thousand short tons in 1977 to 782 thousand short tons in 1979. (Report at A-18; Table 4)

8. Domestic shipments of cold merchant pig iron decreased from 962,000 short tons in 1977 to 812,000 short tons in 1978 to 703,000 short tons in 1979. (Report at A-29; Table 14)

9. As a share of total merchant pig iron shipments, hot metal has remained stable not only over the 1977-79 period but also over the long run period from 1968-79. At the same time, the share controlled by cold metal has declined over both the long and short run.

<u>Year</u>	<u>Hot Metal</u>	<u>Cold Metal</u>	(1,000 net ton)
1968	1,150	2,096	
1977	1,144	962	
1979	1,151	703	

(Report at A-26; Table 12)

10. Sales of cold pig iron were 890,000 short tons in 1977, 900,000 short tons in 1978, and 715,000 short tons in 1979. The value of the sales was less in 1979 than in either of the other two years, being \$138 million in 1979, \$158 million in 1978, and \$163 million in 1977. (Report at A-20; Table 6)

11. Confidential questionnaire responses provided evidence of sales lost to imports from Brazil, the total amount of which were about \$26 million in 1977, \$8 million in 1978, and \$5 million in 1979. (Report at A-50; Table 26)

12. The ratio of imports of pig iron from Brazil to apparent consumption of cold pig iron increased from 1.9 percent in 1975 to 9.9 percent in 1977 to 17.2 percent in 1979. (Report at A-36, Table 19)

13. Net operating profit on production of cold pig iron decreased by 70.2 percent from \$11.9 million in 1977 to \$3.6 million in 1979. Profit, as a percent of net sales, dropped from 9.3 percent in 1977 to a loss of 1.5 percent in 1978 before increasing to 3.4 percent in 1979. (Report at A-33; Table 16)

14. Productivity for the domestic producers of cold pig iron was 0.440 tons per person-hours in 1977, 0.365 tons in 1978, and 0.515 tons in 1979, a 14.6 percent increase over 1977. (Report at A-31)

15. Producers return on investment, measured both a ratio of net operating profits to book value and replacement value of net assets, decreased from 1977 to 1979. (Report at A-34; Table 17)

16. Capacity utilization decreased from 42.2 percent in 1975 to 36.9 percent in 1978 and increased to 54.1 percent in 1979. The increase was primarily attributable to the 900,000 ton decline in production capacity in that year. (Report at A-18-19; Table 5)

17. Adjusted inventory data show an increase in end of period inventories from 104,000 short tons in 1977 to 233,000 short tons in 1979. The ratio of inventories to sales shows an increase from 11.7 percent in 1977 to 32.6 percent in 1979. (Report at A-21; Table 7.)

18. The average number of production workers for cold pig iron decreased from 1,519 in 1977 to 956 in 1979, or by 37.1 percent. (Report at A-31; Table 15)

19. Wages, as measured by cost of direct labor per person-hour, increased 12.9 percent from 1977 to 1979 for the cold pig iron producers reporting to the Commission. (Report at A-31)

20. Capital expenditures by cold pig iron producers, increased from \$3.6 million in 1977 to \$7.7 million in 1978, then dropped sharply in 1979 to \$1.6 million. (Report at A-34)

21. Demand, as measured by apparent consumption, has declined over the long run from 2.8 million short tons in 1968 to 1.3 million short tons in 1977 to 1.1 million short tons in 1979. As the market for cold merchant pig iron progressively declined, total imports' share increased from a level of 15-18 percent in the early 1970's to 35-46 percent in the late 1970's. (Report at A-28 - 29; Table 14)

22. In September 1978, U.S. Steel closed its plant at Cleveland, Ohio, and in December 1979, Interlake, Inc. closed its Toledo, Ohio plant. Cyclops Corp. and U.S. Steel are considering closure of their respective plants at Portsmouth, Ohio, and Geneva, Utah. (Report at A-19)

23. Foundries have been substituting cheaper steel scrap for cold pig iron with their raw material input shifting to an 87-88 percent scrap, 12-13 percent pig iron ratio. (Report at A-36- 37; Table 20)

24. From 1975 through 1979, the wholesale price index rose 40 percent, with the index for foundry forge products rising 50 percent. At the same time, the price index for domestic pig iron rose only 10 percent. (Report at A-45; Figure 5)

Conclusions of law

A. We determine that the domestic industry against which the impact of subsidized imports of pig iron from Brazil should be measured is the merchant producers of cold pig iron.

B. We determine that the domestic industry is materially injured by reason of subsidized imports of pig iron from Brazil.

Statement of Reasons of Chairman Catherine Bedell and
Commissioner George M. Moore

On the basis of the record developed in this investigation, we determine, pursuant to section 705 of the Tariff Act of 1930, that an industry in the United States is being materially injured by reason of imports of pig iron from Brazil which the administering authority has found to be benefiting from countervailable subsidies of the Government of Brazil.

Countervailable subsidies

The administering authority determined that the following three programs of the Government of Brazil confer benefits on all pig iron exports which constitute the payment of a subsidy under U.S. countervailing duty law: the excessive remission of an industrial products tax on pig iron at the time of exportation, working capital financing at preferential rates, and advances of Brazilian cruzeiros against foreign-exchange contracts and foreign-exchange receivables at preferential interest rates. These benefits were first found to average 24.5 percent, ad valorem, f.o.b. Vitoria, Brazil, and later corrected to read 21.22 percent. The average was determined on the basis of the weighted average benefits received by 16 specific Brazilian firms and is applicable to all Brazilian exporters not included in the 16 specific companies. However, the Government of Brazil is in the process of removing some of these benefits, and the administering authority has revised the magnitude of these benefits accordingly; they are now found to average 6.07 percent ad valorem, f.o.b. Vitoria, Brazil and range from 2.85 percent to 15.42 percent for the 16 individual Brazilian firms.

Domestic industry

In its letter of November 19, 1979, advising the Commission that a bounty or grant is being paid with respect to pig iron, the administering authority stated that the product with respect to which it had made its determination is pig iron imported from Brazil and entered under TSUS item 607.15. Pig iron entering under TSUS item 607.15 (reclassified as TSUS item 606.13) will be referred to in this opinion as merchant pig iron. Such imports consist almost entirely of cold merchant pig iron.

In making a determination under section 705(b) of the Tariff Act the Commission must determine whether an industry in the United States is materially injured or is threatened with material injury by reason of imports of the merchandise with respect to which the administering authority has made an affirmative determination. 1/ Under section 771(4) of the act the term "industry" is defined as meaning "the domestic producers as a whole of a like product, or those producers whose collective output of the like product constitutes a major proportion of the total domestic production of that product." In assessing the effect of the subsidized imports on this industry, section 771(4)(D) directs that "[t]he effect of subsidized . . . imports shall be assessed in relation to the United States production of a like product if available data permit the separate identification of production in terms of such criteria as the production process or the producer's profits." Section 771(10) defines the term "like product" as "a product which is like, or in the

1/ Whether the establishment of an industry in the United States is materially retarded is also a possible issue under sec. 705(b) of the act, but it is not an issue in this investigation.

absence of like, most similar in characteristics and uses with, the article subject to an investigation" Since there are domestic producers of cold merchant pig iron, a product "like" the imported product, we have considered the relevant domestic industry to consist of the facilities in the United States used in the production of cold merchant pig iron, and, inasmuch as the Commission has been able to obtain information which permits the separate identification of data with respect to the production of cold merchant pig iron, we have assessed the impact of the subject imports on the domestic production of this product. Currently there are six domestic producers, two of which are considering closing their plants and two of which have closed major pig iron facilities in the recent past but still operate other pig iron facilities. 2/

Material injury by reason of subsidized imports

Pursuant to section 771(7) of the act, the term "material injury" means "harm which is not inconsequential, immaterial, or unimportant." In determining whether an industry is materially injured the Commission shall consider, among other factors--

- (i) the volume of imports of the merchandise which is the subject of the investigation;
- (ii) the effect of the imports of that merchandise on prices in the United States for like products, and
- (iii) the impact of imports of such merchandise on domestic producers of like products.

2/ See pp. A-7 and A-18 of the Commission Report (C.R.).

As set forth below, subsection (C) provides further guidance to the Commission with respect to the evaluation of these factors.

It is clear from the legislative history of the Trade Agreements Act of 1979 that in determining whether material injury is "by reason of" subsidized imports the Commission is to interpret this causation standard in the same manner as it was interpreted under prior law. 3/ It is also clear from the legislative history that section 705 does not contemplate--

that the effects from the subsidized imports be weighed against the effects associated with other factors (e.g., the volume and prices of nonsubsidized imports, contraction in demand or changes in patterns in consumption, trade restrictive practices of and competition between the foreign and domestic producers, developments in technology, and the export performance and productivity of the domestic industry) which may be contributing to the overall injury to an industry. Nor is the issue whether subsidized imports are the principal, a substantial, or a significant cause of material injury. 4/

Volume of imports

Section 771(7)(C)(i) directs that, in evaluating the volume of imports, "the Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States, is significant."

Data obtained by the Commission during its investigation indicate that imports from Brazil totaled about 26,000 short tons, or 5 percent of total imports, in 1975. These imports climbed to a level of about 184,000 short

3/ Trade Agreements Act of 1979: Report of the Committee on Finance . . . , S. Rept. No. 96-249 (96 Cong., 1st Sess.), 1979, p. 57. Trade Agreements Act of 1979: Report of the Committee on Ways and Means . . . , H. Rept. No. 96-317 (96 Cong., 1st Sess.), 1979, pp. 46-47.

4/ Senate Report 96-249, p. 57.

tons, or 39 percent of total imports, in 1979. The ratio of imports from Brazil to domestic production increased from 14.4 percent in 1977 to 20.3 percent in 1979, and the ratio of these imports to domestic consumption rose from 1.9 percent in 1975 to 9.9 percent in 1977 and to 17.2 percent in 1979. 5/ Thus, it is clear that there has been a significant increase in imports both in absolute terms and relative to domestic production and consumption.

Price

Section 771(7)(C)(ii) directs that, in evaluating the effect of subsidized imports on prices, the Commission shall consider whether--

- (I) there has been significant price undercutting by the imported merchandise as compared with the price of like products in the United States, and
- (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.

During the relevant period, margins of underselling were frequently as high as \$40 to \$50 per ton or there was a price advantage of often more than 20 percent. 6/ Only in late 1979 did this margin narrow appreciably. Moreover, imported pig iron from Brazil sold at lower prices in areas more distant from domestic producers' locations. 7/ At the Commission hearing, importers admitted that low prices were used as a tool for gaining access to the market, at least through 1978. 8/ The price-suppressing impact of these

5/ C.R., pp. A-25 and A-36.

6/ C.R., pp. A-37-48.

7/ C.R., pp. A-41-43.

8/ Transcript of hearing, pp. 144-145, 161, 170.

subsidized imports sold at low prices is reflected in the minimal increase in producers' prices in the face of sharply increased costs of production. 9/ The high level of imports from Brazil during 1977-79 not only suppressed prices, but in some instances resulted in price reductions by domestic producers. 10/

Impact on affected industry

Section 771(7)(C)(iii) directs that, in examining the impact of subsidized imports on the domestic industry--the Commission shall evaluate all relevant economic factors which have a bearing on the state of the industry, including, but not limited to--

- (I) actual and potential decline in output, sales, market share, profits, productivity, return on investments, and utilization of capacity,
- (II) factors affecting domestic prices, and
- (III) actual and potential negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment.

During 1977-79, there was a decline in demand for cold merchant pig iron as measured by the decline in apparent domestic consumption from 1.3 million short tons to 1.1 million short tons. However, the share of apparent domestic consumption accounted for by imports from Brazil increased sharply from 9.9 percent to 17.2 percent in the same period. 11/ Information developed by the Commission during its investigation indicates that the increased presence of

9/ C.R., p. A-45; petitioner's posthearing brief, p. 3.

10/ C.R., p. A-48; transcript of the hearing, pp. 17-19, 37-38.

11/ C.R., p. A-36.

imports from Brazil intensified the adverse affects of an already-shrinking market. 12/ The success of the low-priced sales effort is evident in import figures and in sales lost by domestic producers, as well as in production, shipments, inventories, and employment figures.

During 1977-79, domestic production fell about 17 percent, 13/ producers' sales fell about 15 percent (by value), 14/ and producers' inventories (adjusted) increased as a share of sales from 12 percent to 33 percent. 15/ Utilization of capacity was low throughout the period, and only the exit of two firms and the resulting drop in capacity pushed capacity utilization to a level of 54 percent in 1979. 16/ Employment in the industry declined 29 percent from 1977 to 1979, with a parallel drop in man-hours worked. 17/ Productivity as measured by output per man-hour reported for six cold merchant pig iron producers increased 14.6 percent from 1977 to 1979. 18/

There is ample evidence of sales lost to imports from Brazil during the period under review. Domestic producers provided numerous specific instances of lost sales and lost revenues attributable to low-priced imports from Brazil, which were subsequently confirmed by the Commission. 19/ According to data from the purchasers' questionnaire, the key factor in their decision to purchase Brazilian pig iron was price. 20/

12/ C.R., pp. A-29, A-48; petitioner's prehearing statement, pp. 9-11; petitioner's posthearing brief, p. 2-3; transcript of the hearing, pp. 12-13.

13/ C.R., p. A-16.

14/ C.R. p. A-20.

15/ C.R., p. A-21.

16/ C.R., pp. A-18-19.

17/ C.R., pp. A-31.

18/ C.R., p. A-31.

19/ C.R., pp. A-48-50.

20/ C.R., p. A-48-49.

Material injury to the industry stemming from the impact of low-priced imports of pig iron from Brazil is also sharply evident in data collected on profitability. Net operating profit of four cold merchant pig iron producers decreased from \$11.6 million in 1977 to \$3.6 million in 1979, or by 70 percent. The ratio of net operating profit to net sales dropped from 9.3 percent in 1977 to 3.4 percent in 1979, a loss of 1.5 percent occurred in 1978. 21/ If Cyclops Corp. fulfills its announced intention to close its plant on May 31, 1980, the writeoff will apply to 1979 earnings and will result in a further decrease in the net operating profit for the cold merchant pig iron industry. 22/

Investment by the four cold merchant pig iron producers reporting to the Commission declined from \$280 million in 1977 to \$250 million in 1979. The ratio of return on investment for these producers (net operating project to investment) declined from 4.3 percent in 1977 to 1.6 percent in 1979. 23/

On the basis of these factors, we have determined that the domestic pig iron industry is materially injured by reason of subsidized imports.

21/ C.R., pp. A-32-33.

22/ C.R., p. A-32.

23/ C.R., p. A-34.

INFORMATION OBTAINED IN THE INVESTIGATION

Introduction

On November 20, 1979, the U.S. International Trade Commission received advice from the Department of the Treasury that a bounty or grant was being paid with respect to pig iron imported from Brazil, entered duty free under item 607.15 of the Tariff Schedules of the United States (TSUS). 1/ Accordingly, on December 3, 1979, the Commission instituted investigation No. 303-TA-12 under section 303(b) of the Tariff Act of 1930, to determine whether an industry in the United States is being or is likely to be injured, or is prevented from being established, by reason of the importation of such merchandise into the United States. The countervailing duty law, however, was amended and supplemented on January 1, 1980, by the Trade Agreements Act of 1979. Under section 102 of that act, the Commission was required to terminate any injury investigation in progress on January 1, 1980, and to initiate under Section 701 of the Tariff Act of 1930 an investigation which must be completed within 75 days of January 1, 1980. The new investigation (No. 701-TA-2 (Final)) is to determine whether an industry in the United States is materially injured, or is threatened with material injury, or whether the establishment of an industry in the United States is materially retarded, by reason of the importation of pig iron from Brazil determined by the Department of Treasury to have been subsidized.

Notice of the institution of the Commission's investigation and of a public hearing to be held in connection therewith was duly given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, D.C., and at the Commission's New York Office, and by publishing the notice in the Federal Register of December 12, 1979 (44 F.R. 71915). 2/ The public hearing was held in Washington, D.C., on Wednesday, February 6, 1980.

The report is based on data obtained from the administering authority, the U.S. Department of the Interior, the American Iron and Steel Institute, official statistics of the U.S. Department of Commerce, from questionnaires sent to producers and importers, from testimony given at the public hearing, from briefs and statements filed by interested parties, from documented personal interviews, and from the Commission's files.

Information Obtained From the Administering Authority

The final affirmative countervailing duty determination of the Treasury Department in the instant case was based on a finding that three programs of the Government of Brazil which conferred benefits upon the manufacture, production, or exportation of pig iron constituted the payment of bounties or grants under the U.S. countervailing duty law. These three programs included--

- (1) The excessive remission of the Industrial Products Tax (IPI), upon export of the subject merchandise. The

1/ A copy of Treasury's letter to the Commission is presented in App. A.

2/ A copy of the Commission's notice of investigation and hearing is presented in app. B.

exporter, under this export incentive program, not only is granted remission of the IPI tax which ordinarily would be paid on the product, but also receives an additional IPI credit that can be used to pay other tax liability and in some circumstances can be transferred. The ordinary remission of the IPI tax is not regarded as a bounty or grant.

The extra tax credit, however, has been determined to be countervailable in all previous cases involving Brazilian export products. The excessive IPI credit in the case of pig iron was 17 percent at the time of the preliminary affirmative determination, but was set at 15.8 percent of f.o.b. value in Treasury's final determination. ^{1/} The Government of Brazil eliminated the excessive IPI credit on December 7, 1979, and Treasury revised the size of the bounties accordingly.

- (2) Working capital financing under Finance Ministry Resolution 398 at preferential rates lower than those ordinarily available commercially. Such loans are granted exemption from (a) the ordinary commercial loan requirement of a one-third compensating balance and (b) the 1 percent financial transactions tax. A limit is set on the amount that can be borrowed at the preferential rate, based on the value of the prior year's exports, a figure of 30 percent for pig iron exports. The Department of the Treasury has previously found this program also constituted a countervailable subsidy. The benefit of this bounty or grant ranged from 1 percent to 12 percent of f.o.b. value according to the particular producer involved.
- (3) Advances, at preferential interest rates, of Brazilian cruzeiros up to 180 days against foreign exchange contracts and foreign exchange receivables under Finance Ministry Resolution 331. The interest rate charged was determined to be at lower rates than for regular short-term commercial loans. The benefits conferred under this program to particular companies ranged from 0 percent to 11.7 percent of f.o.b. value of total exports.

Treasury found that the magnitude of the subsidy benefits of the above three Brazilian programs to exporters of pig iron averaged 24.5 percent of the f.o.b. value during the time period under consideration in this investigation. This applied to all imports of pig iron from Brazil under investigation. Suspension of liquidation of imports of Brazilian pig iron began November 20, 1979.

^{1/} See app. A.

As a result of action announced by the Brazilian Government on December 20, eliminating the excessive remission of the IPI for all Brazilian exports, including pig iron, Treasury revised the net countervailable subsidy figure from a weighted average of 24.5 percent to 9.15 percent (app. C). 1/

On an individual producer basis, the revised level of subsidy benefits ranged from 4.3 percent to 23.7 percent (of f.o.b. value) among the 16 companies determined by Treasury to be recipients of countervailable bounties or grants related to the export of pig iron to the United States. The individual producer levels of countervailable subsidy by reason of bounty or grant is shown in the Treasury Department's revised final determination notice to the Chairman (app. C). By virtue of this Treasury determination, in the event of a material injury finding by the Commission, countervailing duties would be assessed on a company-by-company basis rather than on the usual weighted average single-duty basis.

On February 21, 1980, the Commission was advised that as a result of additional information supplied by the Government of Brazil, the Commerce Department had determined that further revisions in the net bounties or grants found with respect to each of the 16 companies originally investigated were necessary. Commerce established that the manner in which benefits bestowed under two export financing programs were calculated was based on inaccurate information supplied by the Brazilians. After recalculation, the new level of subsidy benefits ranged from 2.9 percent to 15.4 percent with a weighted average subsidy benefit of 6.07 percent. Table 1 shows the initial and recalculated rates of subsidy by Brazilian firm and the exports of each firm to the U.S.

The Product

Description and uses

Pig iron covered by this investigation refers to iron metal in the form of a pig (block) that can vary in weight from 10 pounds to 80 pounds, and that contains little or no alloying ingredients. Pig iron that contains over 0.2 percent by weight of chromium, over 0.1 percent by weight of molybdenum, over 0.3 percent by weight of tungsten, or over 0.1 percent by weight of vanadium is not subject to this investigation. Merchant pig iron, as defined by the American Society for Testing and Materials (ASTM), refers to pig iron made in a blast furnace from iron ore and used by foundries. Thus pig iron used to make steel would not be included in the definition of merchant pig iron. The ASTM definition would include hot metal used to make ingot molds and cold pigs

1/ The Brazilian Government also announced the devaluation of its currency from 32 to 42.5 cruzeiros per U.S. dollar.

Table 1.--Pig Iron: Exports from Brazil to the United States, 1978, by Brazilian producer and export channel, range of value per ton, F.O.B. Vitoria, Brazil, level of subsidy and subsequent revisions, as calculated by the administering authority

Export channel and producer	Exports to	Range of F.O.B.	Initial	Corrected	Revised	Corrected
	the U.S.	value per	subsidy	initial	subsidy	revised
	Net tons	Dollars	1/	subsidy 2/	3/	subsidy 4/
				Percent F.O.B.value		
Channel Cimetal						
Cimetal Siderurgica S.A.	***	***	24.3	21.2	8.5	5.41
Siderugical Uniao Bondespachense	***	***	25.3	21.5	11.5	7.70
Siderurgica Bandeirante Ltda.	***	***	23.1	20.5	7.3	4.70
LUCAPE	***	***	-	-	-	-
Total	***	***	-	-	-	-
Channel Unexport						
Cia Setelagoana de Siderurgica	***	5/	5/ 24.9	21.9	5/ 9.1	5/ 6.08
Siderurgica Valinho S.A.	***	5/	5/ 22.0	19.9	5/ 6.2	5/ 4.12
Siderurgica Itatiaia S.A.	***	5/	5/ 27.7	23.7	5/ 11.9	5/ 7.95
Usina Sid. Pedra Negra S.A.	***	-	-	-	-	-
Total	***	-	-	-	-	-
Channel Phibro						
Usina Siderurgica Paraense S.A.	***	***	21.8	19.4	8.0	5.62
Cia Brasileira de Ferro	***	***	29.5	24.2	15.7	10.40
Siderurgica Sa Sebastiao de Itatiaia	***	***	30.3	25.2	16.5	11.44
Siderurgica Camaragos S.A.	***	***	19.0	16.9	5.2	3.06
Siderurgica Melo Figureiredo S.A.	***	-	-	-	-	-
IMOL	***	-	-	-	-	-
Metalurgica N.S. da Penha S.A.	***	***	26.2	22.0	-	-
Cia Siderurgica Pitangui	***	***	37.5	29.2	-	-
Total	***	-	-	-	-	-
Channel Interbras						
Siderurgica Alterosa Ltda.	***	***	24.3	20.7	10.5	6.92
Sicafe-Productos Siderurgica	***	-	24.4	20.8	10.6	7.04
Cia Setelagoana de Siderurgica	***	6/	6/ 24.9	21.9	6/ 9.1	6/ 6.08
Siderurgica Santa Maria Ltda.	***	6/	6/ 21.3	18.8	6/ 7.5	6/ 4.98
Siderurgica Valinho S.A.	***	6/	6/ 22.0	19.9	6/ 6.2	6/ 4.12
Siderurgica Sao Paulo Ltda.	***	-	18.1	16.6	4.3	2.85
Siderurgica Cajuruense	***	***	-	-	-	-
Siderurgica Uniao Bondespachense	***	***	25.3	21.5	11.5	7.70
Siderurgica Bandeirante Ltda.	***	***	23.1	20.5	7.3	4.70
Total	***	-	-	-	-	-
Grand total	145,231	-	-	-	-	-
Weighted average margin			24.3	21.2	9.2	6.07

1/ As reported by Department of Treasury on November 20, 1979.

2/ As calculated by U.S. International Trade Commission staff based on corrected data provided by the Department of Commerce on February 21, 1980.

3/ As reported by Department of Treasury on December 31, 1980.

4/ As corrected by Department of Commerce on February 21, 1980.

5/ Value C. & F. Vitoria.

6/ Value F.A.S., Vitoria.

Source: Values per ton compiled from responses to Treasury Dept. questionnaire; subsidies are calculations of the administering authority.

used to make cast products. Pig iron that fits the above description will be referred to as hot or cold merchant pig iron in this report. Imports entering under TSUS item 606.13 (formerly item 607.15) consist almost entirely of cold merchant pig iron.

Pig iron can be produced in either a blast furnace, or, rarely, in an electric furnace. The first step in producing pig iron in a blast furnace is to add fuel in the form of carbon (coke), followed by iron ore and/or scrap and flux (generally in the form of limestone) into the top of the furnace. These raw materials descend into the furnace, where extremely hot gases rise from the combustion process below to heat the raw materials. As the iron-bearing materials increase in temperature, onrushing carbon monoxide gas from the coke combines with the oxygen present in the iron ore and other materials and reduces them to molten iron, which falls to the hearth where it collects until tapped into a ladle. The limestone and other fluxing agents and the impurities in the iron ore and scrap produce molten slag in the blast furnace. The slag acts as a purifier and waste removal medium, floating on top of the denser iron until the molten iron is removed by drawing it off into large ladles. The molten iron (hot metal) can be converted into steel, cast into specific shapes or products, usually ingot molds, or cast into pigs. The pigs are allowed to solidify and cool and are then removed for storage or shipment. Electric furnace pig iron is produced by a roughly similar chemistry, except that the furnace does not require coal or coke for combustion or heat and usually operates on a charge of scrap iron.

The ASTM designates 10 grades of merchant pig iron, but only foundry, malleable, and low-phosphorus grades are commercially important to the end users that make cast-iron products. Basic grade is almost always converted directly to steel and hence would not be merchant pig iron. Foundry grade contains from 1.75 to 3.50 percent silicon and from 0.30 to 0.90 percent phosphorus, malleable contains from 0.10 to 0.30 percent phosphorus, and low phosphorus contains less than 0.035 percent phosphorus. Foundry and malleable grades would be included under high-phosphorus pig iron (over 0.10 percent phosphorus) as defined herein, and low-phosphorus grade would be included under low-phosphorus pig iron. These designations are often not used in the market because some domestic producers have their own classifications which are usually based on chemical composition. The most clear cut and the most important distinction between different types of pig iron is the different amounts of contained phosphorus.

Basic pig iron, which constituted 96 percent of domestic pig iron production in 1978, was primarily produced by steel companies which used it directly in their steel operations. The pig iron is transferred from the blast furnace to the steelmaking furnace while still molten. Nonintegrated steel firms (i.e., those producing no pig iron) must purchase their requirements of basic pig iron; either as hot metal or cold pig. Pig iron purchased in the form of cold pig requires remelting in the steel furnace.

Foundry, malleable, and low-phosphorus grades are used by iron foundries to make iron castings such as engine blocks, other cast-iron auto parts, and soil pipe. Cast-iron foundries charge their furnaces with a mixture of steel scrap, iron scrap, and pig iron ranging in amount from 10 percent to 60

percent. Generally, iron scrap can substitute for pig iron if it is cheaper to do so; however, a foundry operation does not have complete flexibility in this regard because of constraints imposed by the quality specifications for the products. During the period of this investigation, the price of scrap has been far below the price of pig iron thus permitting substitution of scrap for pig iron.

U.S. tariff treatment

Prior to January 1, 1980, cold merchant pig iron was classified under item 607.15 of the TSUS, which provides for pig iron and cast iron in pigs, blocks, lumps, and similar forms, containing by weight not over 0.2 percent of chromium, 0.1 percent of either molybdenum or vanadium, or 0.3 percent of tungsten. As of January 1, 1980, item 607.15 was redesignated as item 606.13. The column 1 (MFN) rate of duty on item 607.15 was eliminated, effective January 1, 1972, as a result of a concession granted by the United States during the Kennedy round of trade negotiations. The column 2 rate applicable to imports of pig iron from designated Communist-bloc countries is \$1.125 per long ton. Since item 606.13 provides for unconditional duty-free treatment for MFN countries, the pig iron described therein is not an eligible item for duty-free treatment under the Generalized System of Preferences (GSP).

Past Commission investigations

On June 25, 1968, the U.S. Tariff Commission 1/ instituted dumping investigations on pig iron from East Germany, Czechoslovakia, Romania, and the U.S.S.R., after being revised by the Treasury Department that pig iron from these countries was being sold at less than fair value. The Commission made an affirmative determination in each case. 2/ The injured industry was generally considered to be the facilities of the cold pig iron producers, although one Commissioner considered it to be the facilities of the merchant pig iron producers, hot and cold.

On March 15, 1971, the Treasury Department advised the Tariff Commission that pig iron imported from Canada, Finland, and West Germany was being sold at less than fair value. The Commission made unanimous affirmative determinations with respect to imports of pig iron from Canada and West Germany and made an affirmative determination by a 2-to-2 vote with respect to such imports from Finland 3/. The injured industry was considered to be the facilities of the cold pig iron producers.

1/ Prior to January 3, 1975, the U.S. International Trade Commission was designated the U.S. Tariff Commission.

2/ Investigation Nos. AA1921-52, 53, 54, and 55.

3/ Investigation Nos. AA1921-72-73, and-74.

U.S. Market

The U.S. pig iron market can be subdivided into three distinct sources of demand. U.S. steelmaking companies produce pig iron for use in their own steelmaking operations. This is essentially captive production since the pig iron usually remains in a molten state and is used as a raw material in the steelmaking process. Steelmaking pig iron represented over 96 percent of total U.S. production in 1978 but less than 1 percent of this type of pig iron was shipped for other than the producers' own use. A second source of demand is for nonsteelmaking uses, primarily production of cast-iron products. This demand is satisfied by the shipment of either hot metal or cold pig. Hot metal can only be transported a short distance so most often these shipments represent the transfer of metal from a pig iron producer to a nearby customer, usually an ingot mold foundry. The ingot molds are in turn used by steelmakers to shape molten steel into various sizes for shipment. ^{1/} As shown in the following flow diagram, the shipment of cold pig iron to cast-iron foundries is the smallest segment of the U.S. pig iron market. This is the product traditionally referred to as cold merchant pig iron and this is the only segment of the market that is directly impacted by imports of pig iron.

U.S. Industry

U.S. producers

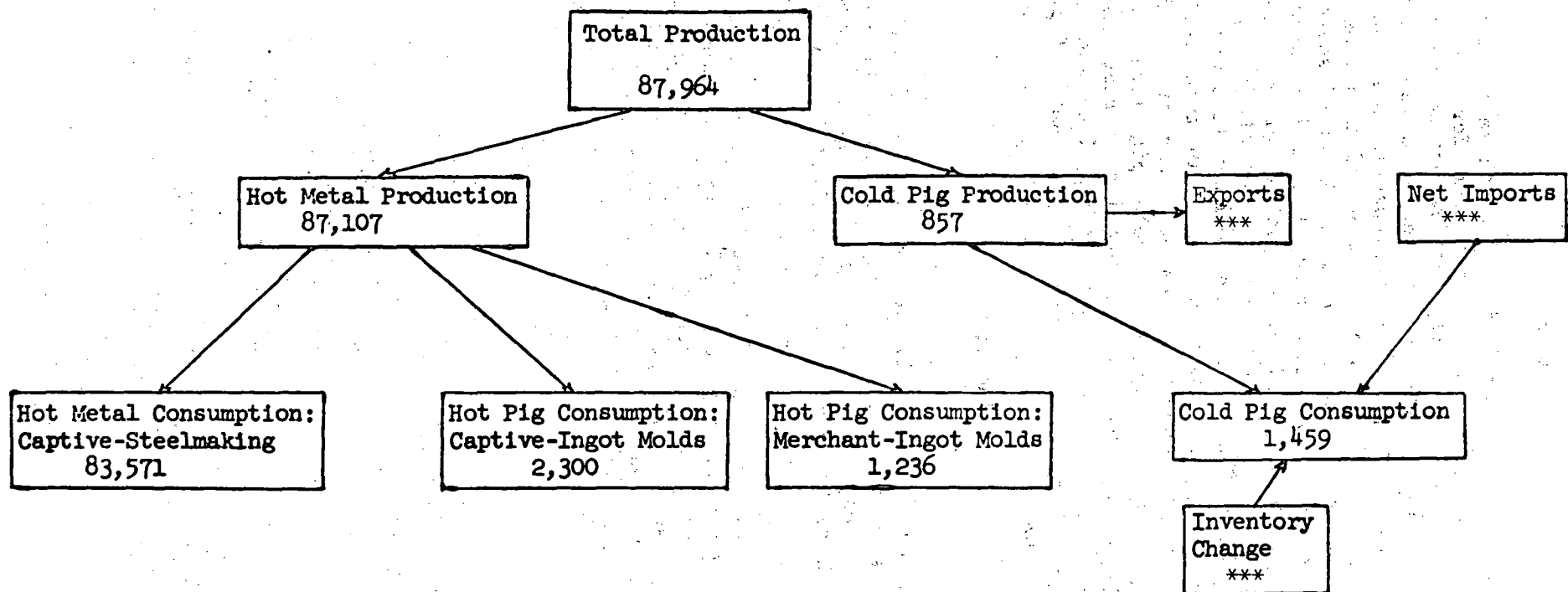
Domestic pig iron producers generally make a variety of other products, usually steel-related; thus sales of merchant pig iron may represent only a small part of their total sales. The most diversified pig iron producers are steel producing firms, such as Cyclops Corp., National Steel, Interlake, Inc. and U.S. Steel.

At least 18 firms produce pig iron, but most of them only for their own use. The domestic cold merchant pig iron industry is composed of six producers which have regularly sold pig iron to others. Some of these firms also produce for their own use, usually producing basic iron for steelmaking or making ingot molds from their own hot metal. The names of these producers and the locations of their plants are as follows:

<u>Name of producer</u>	<u>Plant locations</u>
Empire-Detroit Steel Div.: of Cyclops Corp.	Portsmouth, Ohio
Hanna Furnace Corp.: Subsidiary of National Steel Corp.	Lackawanna, N.Y.
Interlake, Inc.	Chicago, Ill.
Shenango, Inc.	Pittsburgh, Pa.
U.S. Steel Corp.	Geneva, Utah
Jim Walters Resources, Inc.	Birmingham, Ala.

^{1/} Further discussion of hot metal can be found in app. D.

Figure 1.--Pig iron: Supply-demand relationship, 1978
(In thousands of short tons)



A-8

Source: Compiled from official statistics of the U. S. Department of Commerce, statistics of the American Iron and Steel Institute, and from data submitted in response to questionnaires of the U.S. International Trade Commission.

Channels of distribution

Each domestic producer of cold merchant pig iron markets its product either directly or through sales agents. Cold pig iron is usually sold at the f.o.b., loading dock, price of the competitive producer closest to the customer. Therefore, when a Buffalo-based producer wants to sell pig iron in Pittsburgh, where there is a local producer selling at the same price, the Buffalo producer must absorb the freight cost from Buffalo to Pittsburgh. ^{1/} The domestic cold merchant pig iron industry serves seven distinct market areas defined by such economic factors as domestic producer location, location of iron foundries and other users, access to cheap inland water transport, and the location of ocean ports of entry. The size of the market areas is dictated by domestic producers plant location or importers' port of entry, and the constraint of freight costs to specific firms which purchase pig iron. The low value to weight ratio of pig iron makes freight costs a relatively high proportion of purchase price. U.S. market areas, (for pig iron price comparisons) importers' ports of entry and storage depots, and U.S. producers' plant locations and storage depots are listed on the following pages.

^{1/} Data obtained from responses to Commission questionnaires indicate that producers regularly absorb freight costs ranging from \$5/ton to \$30/ton.

^{2/} Freight costs on Brazilian pig iron amount to as much as 10 percent of export value per ton imported to east coast ports and as much as 20 percent imported to west coast ports. Inland freight costs are often higher than ocean freight.

General Market Area 1/

<u>Number and section</u>	<u>Area</u>
I Northeast.	Eastern New York, New Jersey, New England, Pennsylvania, Delaware, Maryland and Northern Virginia
II North Central & Eastern.	Western New York, Western and Southern Pennsylvania, Western West Virginia, Northeast Ohio, and Eastern Michigan.
III West Central States.	Northern Illinois, Northern Indiana, Northwestern Ohio, Iowa, Missouri, Wisconsin, Minnesota, Western Michigan, and Nebraska.
IV Ohio Valley.	Southern Indiana, Southern Illinois, Southern Ohio, and Kentucky.
V Southeastern States.	Tennessee, Mississippi, Arkansas, Louisiana, Alabama, Georgia, Florida, Southern Virginia, North and South Carolina.
VI Southwestern States.	Texas Oklahoma and Kansas
VII Pacific Coast.	Washington, Oregon, California

1/ The states omitted are not significant markets for pig iron.

Importer's ports of entry and storage points, producer's plant
locations and storage points

Importers

Birmingham, Ala.*
 Brownsville, Tex.*
 Camden, N.J.
 Chicago, Ill.
 Cleveland, Ohio
 Detroit, Mich.
 Erie, Pa.
 Holland, Mich
 Houston, Tex.*
 Keokuk, Iowa*
 Laredo, Tex.
 Los Angeles, Calif.
 Louisville, Ky.*
 Memphis, Tenn.*
 Muskegon, Mich.
 New Orleans, La.
 Norfolk, Va.
 Oakland, Calif.
 Portland, Maine
 Portland, Oregon
 Seattle, Wash.
 Toledo, Ohio
 Tulsa, Okla.*

Producers

Albany, N.Y.*
 Aurora, Ind.*
 Birmingham, Ala.
 Buffalo, N.Y.
 Chicago, Ill.
 Cleveland, Ohio*
 Detroit, Mich.
 Geneva, Utah
 Green Bay, Wisc.*
 Minneapolis, Minn.*
 Muskegon, Mich.*
 Pittsburgh, Pa.
 Portsmouth, Ohio*
 Sharpsville, Pa.
 Toledo, Ohio*

*Importers' storage points.

*Producers' storage points.

The Foreign Industry

Export capacity

Pig iron is produced in almost 50 countries, but the exporters of pig iron are much fewer. Export capacity for the countries that provided U.S. imports in 1978 is shown in table 2.

Table 2.--Pig iron: U.S. imports for consumption and export capacity, 1/ by principal sources, 1978

(In thousands of short tons)				
Source	:	U.S. imports	:	Export capacity
Canada-----	:	240	:	650
Brazil-----	:	198	:	1,100
Sweden-----	:	144	:	650
France-----	:	30	:	200
Australia-----	:	16	:	900
United Kingdom-----	:	11	:	50
Republic of South Africa-----	:	9	:	500
Belgium-----	:	7	:	50
India-----	:	<u>2/</u>	:	800
	:		:	

1/ Export capacity estimated from actual export trends.

2/ Less than 500 tons.

Source: Imports compiled from official statistics of the U.S. Department of Commerce, and export capacity estimated from trade statistics supplied by the U.S. Department of the Interior, Bureau of Mines.

The Brazilian industry

Over 100 Brazilian firms, employing about 54,000 persons, produce pig iron. Brazil exported slightly in excess of 1 million tons of pig iron in 1978, of which 198,000 tons were imported into the United States. Of the pig iron imported from Brazil in 1978, *** percent 1/ was supplied by Usina Siderurgica Paraense S.A. (USIPA), a subsidiary of Philipp Brothers, *** percent by Cia Siderurgica Pitangui, *** percent by Cimetel Siderurgica S.A., and *** percent by Cia. Brasileira de Ferro, also a subsidiary of Philipp Brothers. The balance was supplied by a number of much smaller producers. All of these operations use charcoal as a fuel and, with the exception of the largest producers, employ relatively basic production techniques. For example, many of the small operations utilize blast furnaces which are virtually homemade and cast the metal on sand rather using a casting machine. Much of the pig iron produced by these methods has not been of a constant quality or did not meet international standards. According to the major importer, quality is now much better. 2/

1/ Calculated from data submitted in response to questionnaires of the U.S. International Trade Commission.

2/ See hearing transcript, pg. 145.

The potential impact of Brazilian pig iron on the U.S. market is dependent on a number of factors. Brazilian production capacity utilization figures are not available; however, Brazilian officials claim there is no surplus capacity while petitioners claim a surplus of 10 to 20 percent. 1/ Brazil's export capacity was estimated to be 1.1 million tons in 1978 of which about 14 percent entered the U.S. market. The European Economic Community (EEC) has been an important market for Brazilian exports, however, as of March 26, 1979, dumping duties were levied on Brazilian pig iron imported into the EEC by way of a third (non-EEC) country. Although this action would indicate a potential shift of exports from the EEC to other markets, the Brazilian Government has been actively pursuing long-term contracts with Far Eastern customers such as Japan, China, Taiwan, and Korea. The recent devaluation of Brazilian currency should make its exports more attractive in these markets where demand has been strong.

U.S. Importers

Export channels for Brazilian pig iron

The Government of Brazil has required that exports of pig iron be routed through four large collecting and coordinating channels: Channel Cimetel, Channel Unexport, Channel Phibro, and Channel Interbras. Benefits of this system are increased export efficiency, the ability to fill large orders, the ability to meet long-term-contract supply requirements and the ability to control prices, thus minimizing any adverse price competition between Brazilian producers. Improved quality control is also an implicit benefit of this system.

Channel Phibro serves as the export conduit of six Brazilian producers. The largest among these firms is USIPA (Usina Siderurgica Paraense S.A.), a subsidiary of Philipp Brothers, 2/ the largest importer of Brazilian pig iron into the United States. Philipp Brothers accounts for an estimated *** percent of total imports of Brazilian pig. It obtains its pig iron from its USIPA and Cia. Brasileira de Ferro subsidiaries and from other members of the export channel it utilizes. Channel Cimetel is also a significant source of U.S. imports; the other two channels are small and relatively unimportant. Major producers and their specified channel of Brazilian pig iron for export purposes are listed in the following tabulation:

1/ See hearing transcript, pp. 205-207.

2/ Philipp Brothers is a subsidiary of Engelhard Minerals Corp., a major multinational corporation in the minerals and metals market.

Channel Cimetal

Cimetal Siderurgica S.A.
Siderurgica Uniao Bondespachense
Siderurgica Bandeirantes Ltda.

Channel Unexport

Cia. Setelagoana de Siderurgia
Siderurgica Valinho S.A.
Siderurgica Itatiaia S.A.

Channel Phibro

Usina Siderurgica Paraense S.A.
Cia. Brasileira de Ferro
Cia. Sao Sebastiao de Itatiaiuçu
Siderurgica Camaragos S.A.
Metalurgica N. Sra. da Penha S.A.
Cia. Siderurgica Pitangui

Channel Intrabras

Siderurgica Alterosa Ltda.
Sicafe - Produtos Siderurgicos
Siderurgica Santa Maria
Siderurgica Valinho S.A.
Cia. Setelagoana de Siderurgia
Siderurgica Sao Paulo
Sid. Uniao Bondespachense
Siderurgica Bandeirantes Ltda.

Import distribution channels of Brazilian pig iron in the United States.--Brazilian pig iron is marketed in the United States in each of the seven market areas previously discussed. In order to serve these market areas importers utilize storage depots away from ports of entry. For example, large quantities of Brazilian pig iron are imported through the Port of New Orleans. The imported merchandise directly serves southern and southwestern markets. In addition, pig iron entered at New Orleans is barged up the Mississippi and other inland waterways (e.g., the Ohio River) to storage points in northern markets. In winter, when the St. Lawrence Seaway is closed, such imports are supplied by barge to Great Lakes storage points ordinarily served by direct ocean-borne shipments. Additional costs are incurred by importers and/or purchasers when barging is used. A representative cost of barging is *** per short ton. In order to compete with domestic producers, in all markets, importers must utilize storage depots close to demand centers. This enables importers to deliver pig iron to a purchaser without delay and on a dependable basis. Most small foundries do not carry large inventories but depend on producers or importers for a consistent supply of their pig iron requirements.

Consideration of Material Injury or the Threat Thereof

U.S. production

Domestic pig iron production declined from a peak of 100.9 million short tons in 1973 to 81.3 million short tons in 1977. Production increased in 1978 to 87.7 million short tons. Over 95 percent of production was of basic grade pig iron, used heavily in steelmaking. Production of this kind of pig iron closely followed the cyclical nature of the steel industry, increasing in 1968 and 1969, declining in 1970 and 1971, increasing again in 1972 and 1973, before dropping sharply in 1974 and 1975. However, production of the nonsteelmaking grades, which constitute merchant pig iron, declined over 40 percent from 1968 to 1978 and became an even smaller share of total domestic production as shown in table 3.

Table 3.--Pig iron: U.S. production of pig iron, 1968-79

Period	Pig iron production			Production ratio for other grades to total
	Basic	Other grades	Total	
	-----Million short tons-----			
				Percent
1968-----	83.4	5.4	88.8	6.1
1969-----	89.9	5.1	95.0	5.4
1970-----	86.4	5.0	91.4	5.5
1971-----	77.3	4.0	81.3	4.9
1972-----	84.0	4.9	88.9	5.5
1973-----	96.2	4.6	100.9	4.6
1974-----	91.2	4.7	95.9	4.9
1975-----	75.9	4.0	79.9	5.0
1976-----	82.9	4.0	86.9	4.6
1977-----	78.2	3.1	81.3	3.8
1978-----	84.5	3.2	87.7	3.6
1979 (preliminary)-----	84.8	2.2	87.0	2.5

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

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

The plant closings of 1978 and 1979 had a significant effect on production of cold merchant pig iron, particularly the pig iron with a phosphorus content over 0.10 percent, as shown in table 4.

Table 4.--Cold pig iron: U.S. production, by phosphorus content, 1977-79

(In thousands of short tons)

Type	1977	1978	1979
Containing over 0.10 percent phosphorus (hi-phos)-----	284.9	200.0	***
Containing 0.076 to 0.10 percent phosphorus (med.-phos)-----	528.8	540.2	567.8
Containing under 0.076 percent phosphorus (low-phos)-----	121.8	116.9	***
Total-----	935.5	857.1	782.0

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

Production of medium phosphorus pig iron increased about 7 percent from 1977 to 1979, constituting an increasing share of total U.S. production. Medium phosphorus pig iron represented 57 percent of production in 1977; 73 percent in 1979.

Capacity utilization

The petitioners alleged a low utilization of capacity for cold merchant pig iron. The following table utilizes capacity figures provided by petitioners. Capacity utilization decreased from 42.2 percent in 1975 to 36.9 percent in 1978. The large increase in capacity utilization to 54.1 percent that occurred in 1979 was primarily attributable to the 900,000 ton decline in production capacity in that year. Questionnaire data received from petitioners showed the same trend in utilization.

Table 5.--Pig iron: Cold pig iron capacity shipments other than for own use, and capacity utilization, 1968-79

Period	Capacity	Shipments	Capacity utilization
	1,000 short tons	1,000 short tons	Percent
1968-----	3,000	2,096	69.9
1969-----	3,000	2,355	78.5
1970-----	3,000	2,387	79.6
1971-----	3,000	1,703	56.8
1972-----	3,000	1,714	57.1
1973-----	2,600	1,974	75.9
1974-----	2,600	1,470	56.5
1975-----	2,200	929	42.2
1976-----	2,200	1,001	45.5
1977-----	2,200	962	43.7
1978-----	2,200	812	36.9
1979-----	1,300	<u>1/</u> 703	54.1

1/ Estimated.

Source: Compiled from petitioner's data and official statistics of the American Iron and Steel Institute.

There have been some recent closures of domestic facilities, in addition to those in earlier years that are reflected in the above drop in capacity for cold pig iron. In September 1978, U.S. Steel closed its Cleveland plant and in December 1979, Interlake closed its Toledo plant. Cyclops Corp. and U.S. Steel are considering closure of their respective pig iron facilities in Portsmouth and Geneva.

U.S. producers' sales and exports

Sales of cold pig iron in 1977-79 followed the same trend as production, as shown in table 6.

Table 6.--Cold pig iron: U.S. producers' sales, by phosphorus content, 1977-79

Type	1977	1978	1979
	Quantity (1,000 short tons)		
Containing over 0.10 percent phosphorus-----	250.0	253.5	181.6
Containing 0.076 to 0.10 percent phosphorus-----	508.7	517.8	430.8
Containing under 0.076 percent phosphorus-----	131.6	128.4	102.8
Total-----	890.3	899.7	715.2
	Value (Million dollars)		
Containing over 0.10 percent phosphorus-----	51.3	51.4	43.9
Containing 0.076 to 0.10 percent phosphorus-----	88.1	83.4	74.8
Containing under 0.076 percent phosphorus-----	23.8	23.5	19.5
Total-----	163.2	158.3	138.2

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

Exports of pig iron, as reported by the U.S. Department of Commerce, are shown in the following tabulation:

	Quantity (Short tons)
1973-----	15,000
1974-----	100,000
1975-----	60,000
1976-----	57,000
1977-----	51,000
1978-----	52,000
1979-----	1/ 110,000

Exports have usually been equal to about 15 percent of U.S. imports, except for 1978, when they dropped to 7.8 percent. Although a sizable proportion of these exports go to Mexico (8.7 percent in 1978), they do not include material imported into the United States and then reexported. 2/

1/ Estimated.

2/ See U.S. imports section.

Inventories

A comparison of inventories of cold pig iron with producers' sales of cold pig iron is shown in table 7.

Table 7.--Cold pig iron: U.S. producers' sales and end-of-period inventories, 1977-79

Year	: Producers' : : sales :	: Producers' : : end-of-period : : inventories :	: Ratio of : : inventories : : to sales :	: Producers' : : adjusted : : end-of-period : : inventories :	: Ratio of : : adjusted : : inventories : : to sales :
	: <u>1,000</u> : : <u>short</u> : : <u>tons</u> :	: <u>1,000</u> : : <u>short</u> : : <u>tons</u> :	: <u>Percent</u> :	: <u>1,000</u> : : <u>short</u> : : <u>tons</u> :	: <u>Percent</u> :
1977-----	: 890.0 :	: 487.0 :	: 54.7 :	: 103.9 :	: 11.7 :
1978-----	: 899.7 :	: 467.3 :	: 51.9 :	: 216.7 :	: 24.1 :
1979-----	: 715.2 :	: 361.8 :	: 50.6 :	: 233.5 :	: 32.6 :

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

The unadjusted inventory figures and ratio of inventories to sales show a 25.7 percent decrease in inventories and a drop in the ratio from 54.7 percent in 1977 to 50.6 percent in 1979. However, this unadjusted data includes inventories that were sold off after the closure of two plants and some "beach iron"--steelmaking hot metal that was poured on the ground to solidify when there was no steel furnace to receive it and that was subsequently remelted and used to make steel. After removing this metal, the adjusted inventories show a 124.7 percent increase from 1977 to 1979 and the ratio of inventories to sales shows an increase from 11.7 percent in 1977 to 32.6 percent in 1979. The adjusted data are believed to be more representative of the actual market conditions for domestic cold pig iron.

U.S. imports

Total U.S. imports of pig iron, which are mostly cold merchant pig iron, increased 37.0 percent from 1975 to 1978, or from 478,000 short tons to 655,000 short tons (table 8). Imports then dropped 27.3 percent in 1979 to 476,000 short tons. Imports of pig iron from Brazil increased from 26,000 short tons in 1975 to 198,000 short tons in 1978, an increase of more than 650 percent. Imports from Brazil then dropped 7.1 percent in 1979 to 184,000 short tons.

Table 8.--Pig iron: U.S. imports for consumption,
by principal sources, 1975-79

Source	1975	1976	1977	1978	1979
Quantity (1,000 short tons)					
Canada-----	224	225	189	240	185
Japan-----	104	0	6	0	0
Hungary-----	56	0	0	0	0
Sweden-----	32	8	30	144	10
Brazil-----	26	129	127	198	184
All other-----	36	52	25	73	97
Total-----	478	414	377	655	476
Value (1,000 dollars)					
Canada-----	35,392	33,791	27,326	33,472	28,656
Japan-----	12,575	-	552	-	-
Hungary-----	9,225	-	-	-	-
Sweden-----	3,410	1,013	2,365	9,396	834
Brazil-----	2,717	10,846	11,385	20,353	21,622
All other-----	5,995	5,492	3,757	9,013	12,139
Total-----	69,314	51,142	45,385	72,234	63,251
Unit value (per ton)					
Canada-----	\$158	\$150	\$145	\$140	\$155
Japan-----	121	-	92	-	-
Hungary-----	165	-	-	-	-
Sweden-----	107	127	79	65	83
Brazil-----	105	84	90	103	118
All other-----	167	106	150	124	125
Total-----	145	124	120	110	133

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

Table 9 shows imports of Brazilian pig iron by production source, and also pig iron reexported to Mexico. ^{1/} The dominant role of Philipp Brothers

is shown through its two subsidiaries, Usina Siderurgica Paraense S.A. and Cia Brasileira de Ferro.

Table 9.--Pig iron: U.S. imports from Brazil,
by Brazilian producers, 1977-79

(In thousands of short tons)

Brazilian producer	1977	1978	1979
Usina Siderurgica Paraense S.A.-----	***	***	***
Cia Siderurgica Pitangui-----	***	***	***
Cimetal Siderurgica S.A.-----	***	***	***
Cia Brasileira de Ferro-----	***	***	***
Cia Siderurgica Vale do Paraopeba-----	***	***	***
Siderurgica Valinho S.A. <u>1</u> /-----	***	***	***
Interbras Cayman <u>1</u> /-----	***	***	***
Other producers-----	***	***	***
Unspecified-----	***	***	***
Total-----	127.0	198.0	184.0
Reexported to Mexico <u>2</u> /-----	***	***	***
Net imports-----	***	***	***

1/ This is Channel Interbras, a grouping of a number of small producers.

2/ The pig iron being reexported to Mexico is mostly but not exclusively Brazilian in origin. For example, in *** *** tons or *** percent of the reexports came from Norway.

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

Table 10 shows that most of the pig iron imported from Brazil has had a content of 0.076 to 0.10 percent phosphorus, and very little has been in the category under 0.076 percent phosphorus.

Table 10.--Cold pig iron: U.S. imports from Brazil, by phosphorus content, 1977-79

Year	: High :phosphorus	: Medium : phosphorus	: Low : phosphorus	: Total
Quantity (1,000 short tons)				
1977-----	***	103,347	***	134,676
1978-----	***	125,539	***	161,419
1979-----	***	142,613	***	158,918
Value (1,000 dollars)				
1977-----	***	11,217	***	14,018
1978-----	***	14,725	***	17,301
1979-----	***	19,152	***	21,133
Unit value (per ton)				
1977-----	***	\$108.54	***	\$104.09
1978-----	***	117.29	***	107.18
1979-----	***	134.29	***	132.98

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

About 90 percent of Brazilian imports are classified as medium phosphorus. As shown in table 11, it is this type of pig iron that accounts for a major share of U.S. production.

Table 11.--Pig iron: U.S. imports from Brazil and U.S. production of pig iron, by phosphorus content, 1977-79

Item	Imports from Brazil	Production	Ratio of imports to production
	1,000 short tons	1,000 short tons	Percent
1977:			
Containing over 0.10 percent phosphorus-----	***	285	***
Containing 0.076 to 0.10 percent phosphorus-----	103	529	19.5
Containing under 0.076 percent phosphorus-----	***	122	***
All grades-----	135	936	14.4
1978:			
Containing over 0.10 percent phosphorus-----	***	200	***
Containing 0.076 to 0.10 percent phosphorus-----	126	540	23.3
Containing under 0.076 percent phosphorus-----	***	117	***
All grades-----	161	857	18.8
1979:			
Containing over 0.10 percent phosphorus-----	***	***	9.4
Containing 0.076 to 0.10 percent phosphorus-----	143	568	25.2
Containing under 0.076 percent phosphorus-----	***	***	4.6
All grades-----	159	782	20.3

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

U.S. consumption

Total demand for pig iron.--The trend and structure of shipments of pig iron, including both hot metal and cold metal, are shown in table 12. Hot metal is included because it is closely related to cold pig iron, being produced by the same plants and having a common product stream right to the last step. Both are used to make cast-iron products. These shipments data, published by the American Iron and Steel Institute, are shipments "other than for own use," and will be used to calculate apparent consumption. In other words, they reflect arm's-length, nonrelated party transactions. Data for 1979 are estimates based on responses to Commission's questionnaires.

The data in table 12 is graphed in figure 2 to show the trends in U.S. shipments of hot metal and cold merchant pig iron. The graph shows that demand for this commodity is cyclical and declining in the aggregate. Both components, hot metal and cold pig, reflect the cyclical nature of demand, but only cold metal shipments levels demonstrate the long-term decline. Each successive high point on the graph is lower than the previous highs and each low point lower than its predecessor. The relatively flat post recession (1975-77) level of domestic shipments turned down again, in 1978, concomitant to an upturn in imports.

Apparent consumption has decreased from 4.0 million short tons in 1968 to 2.7 million short tons in 1978, or by 32.8 percent (table 13). This is a reflection of the substitution of scrap for pig iron in the raw material mix that foundries melt to cast into iron products.

Table 12.--Merchant pig iron: U.S. shipments, 1/ by grades, 1968-79

(In thousands of net tons)								
Year	Basic	Bessemer and lowphos	Foundry	Malleable and silvery	Total			
					Total	Hot metal	Cold metal	
1968----	786	534	562	1,364	3,246	1,150	2,096	
1969----	1,010	600	756	1,486	3,852	1,497	2,355	
1970----	781	650	828	1,341	3,600	1,213	2,387	
1971----	463	572	523	1,037	2,595	892	1,703	
1972----	700	563	571	1,075	2,909	1,195	1,714	
1973----	736	598	580	1,398	3,312	1,338	1,974	
1974----	643	487	430	1,223	2,883	1,413	1,470	
1975----	488	379	291	752	1,910	981	929	
1976----	530	439	356	836	2,161	1,160	1,001	
1977----	663	533	173	737	2,106	1,144	962	
1978----	677	413	210	799	2,099	1,287	812	
1979 <u>2/-</u>	538	279	227	811	1,855	1,151	703	

1/ Shipments of pig iron other than for U.S. producers' own use.

2/ Preliminary.

Source: Annual Statistical Report, American Iron and Steel Institute.

Figure 2.--Merchant pig iron: U.S. shipments of cold metal, hot metal and total, by quantity, 1967-78

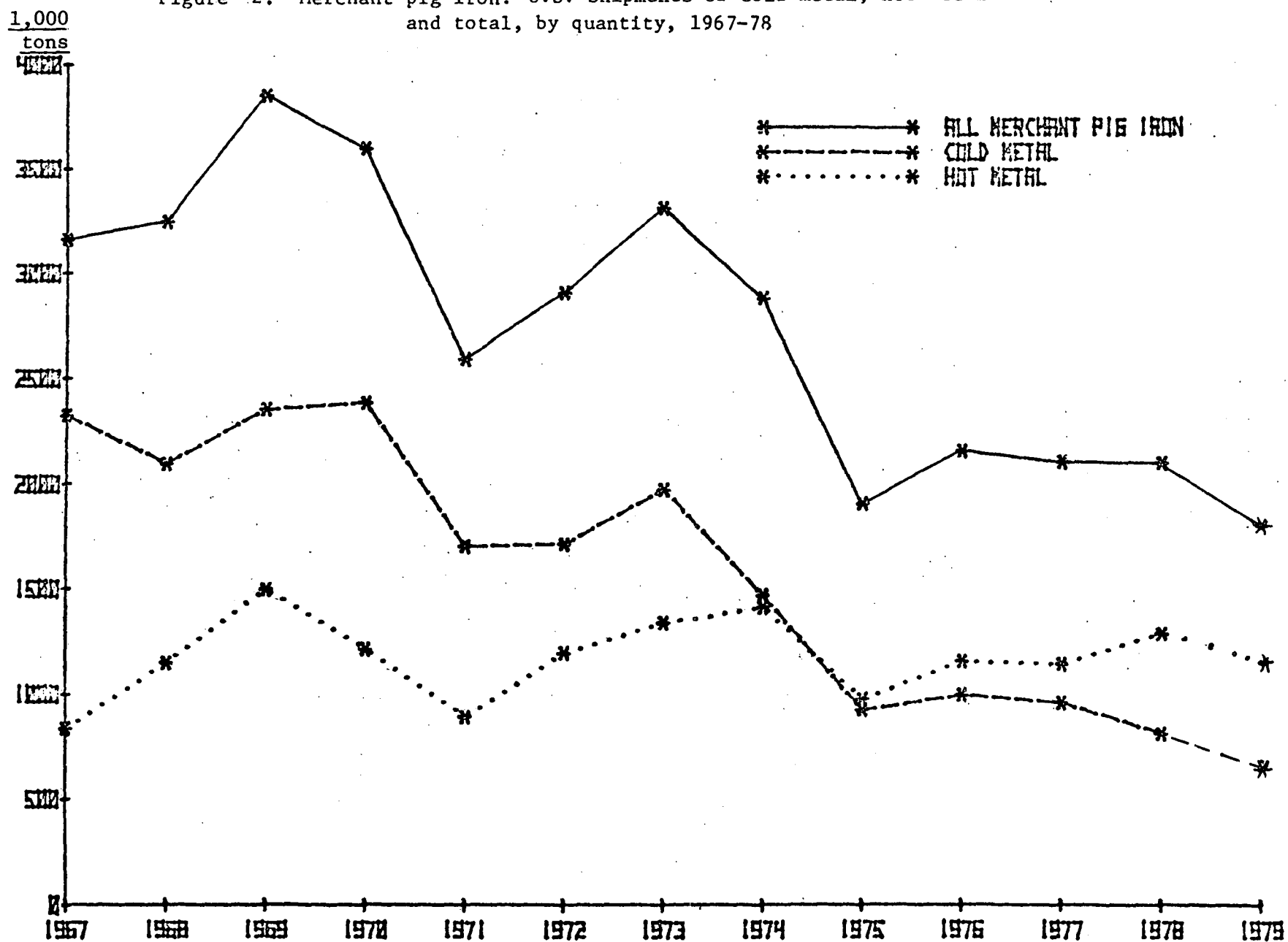


Table 13.--Pig iron: U.S. shipments ^{1/}, imports, exports, and apparent consumption, 1968-79

Year	U.S. shipments	Imports	Exports	Apparent consumption	Ratio of imports to consumption
	1,000 short tons				Percent
1968-----	3,246	786	11	4,021	19.5
1969-----	3,852	407	44	4,215	9.7
1970-----	3,600	249	310	3,539	7.0
1971-----	2,595	306	34	2,867	11.8
1972-----	2,909	637	15	3,531	18.0
1973-----	3,312	446	15	3,743	11.9
1974-----	2,883	342	101	3,124	10.9
1975-----	1,910	478	60	2,328	20.5
1976-----	2,161	414	57	2,518	16.4
1977-----	2,106	377	51	2,432	15.5
1978-----	2,099	655	51	2,703	24.2
1979-----	<u>2/</u> 1,855	476	<u>3/</u> 110	<u>3/</u> 2,221	21.4

1/ Includes domestic shipments of hot and cold merchant pig iron.

2/ Preliminary.

3/ Estimated.

Source: Imports and exports compiled from official statistics of the U.S. Department of Commerce; domestic shipments from American Iron and Steel Institute annual statistical reports.

Demand for cold merchant pig iron.--U.S. shipments ^{1/}, imports, exports and apparent consumption of cold merchant pig iron, 1968-79, are presented in table 14. Figure 3 graphs these data in order to show the changing levels of demand and the changing relationships of imports and U.S. shipments in supplying the demand for cold merchant pig iron.

Demand, as measured by apparent consumption, reflects a cyclical pattern that followed the 1969-71 business cycle downturn and mirrored the troughs and peak of the 1971-75 business cycle. At the same time, the graph shows that the long-run trend of demand for cold merchant pig iron has been on the decline throughout the period 1967-79. This is a reflection of both the substitution of scrap for pig iron by customers (foundries) and the effect of technological change as new efficient furnaces are brought on stream. The pattern of domestic shipments, in turn, parallels that of apparent consumption. Significant deviation from this trend occurred only in 1972-73, when both imports and domestic shipments responded to the surge in demand.

1/ Shipments data are shipments "other than for own use" as published by the American Iron and Steel Institute (AISI). They reflect arm'slength, nonrelated party transactions. Data for 1979 are preliminary numbers from AISI.

that accompanied the steel boom that marked the peak of that business cycle. In 1978, the upturn in demand was more than offset by a relatively sharp increase in imports at the expense of domestic shipments. As a result, the ratio of imports to apparent consumption of cold merchant pig iron rose sharply to a level of 46 percent compared with a 29 percent market ratio in 1977.

The graph also shows that over the decade, the quantity level of imports has remained relatively flat since 1972. Thus, as the market for cold merchant pig iron progressively declined, imports increased proportionally from a level of roughly 15 to 18 percent in the early 1970's to a level of 35 to 46 percent in the late 1970's. The trend in imports for 1977-79 is upward.

The secular decline in demand for cold merchant pig iron as shown on the graph coupled with the high fixed costs associated with this industry suggests a parallel decline in capacity utilization with attendant adverse impact on the industry. Although the long-run trend of imports has remained relatively flat in terms of tonnage, the effects of short run spurts of import growth have apparently aggravated the condition of the domestic industry.

Table 14.--Cold pig iron: U.S. shipments, imports, exports, and apparent consumption, 1968-78

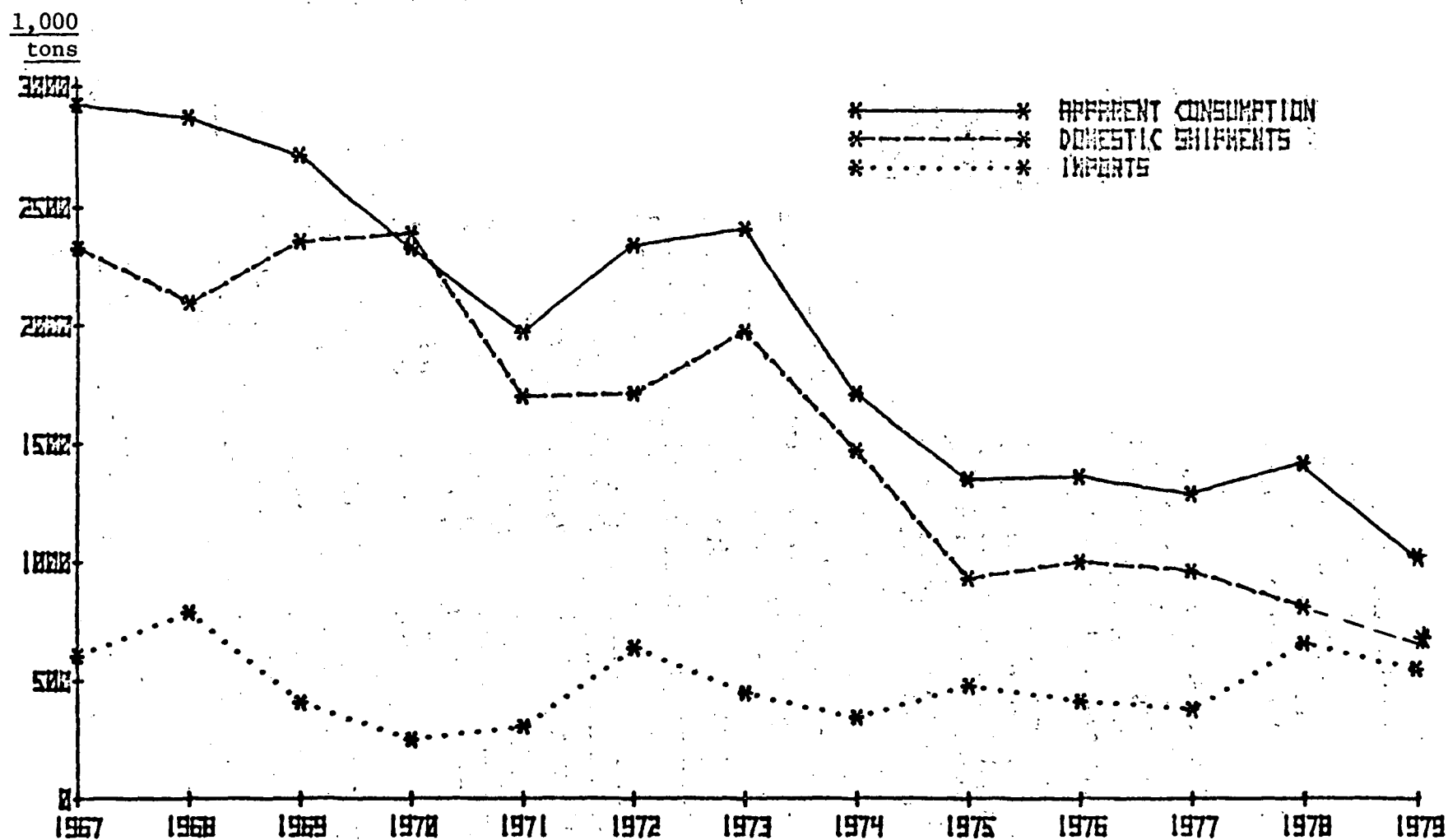
Year	Shipments	Imports	Exports	Apparent consumption	Ratio of imports to consumption
	1,000 short tons				Percent
1968-----	2,096	786	11	2,871	27.4
1969-----	2,355	407	44	2,718	14.9
1970-----	2,387	249	310	2,326	10.7
1971-----	1,703	306	34	1,975	15.5
1972-----	1,714	637	15	2,336	27.3
1973-----	1,974	446	15	2,405	18.5
1974-----	1,470	342	101	1,711	20.0
1975-----	929	478	60	1,347	35.5
1976-----	1,001	414	57	1,358	30.5
1977-----	962	377	51	1,288	29.3
1978-----	812	655	51	1,416	46.3
1979-----	<u>1/</u> 703	476	<u>2/</u> 110	<u>2/</u> 1,069	44.5

1/ Preliminary.

2/ Estimated.

Source: Imports and exports compiled from official statistics of the U.S. Department of Commerce; domestic shipments from American Iron and Steel Institute annual statistical reports.

Figure 3.--Cold merchant pig iron: U.S. shipments, imports and apparent consumption, by quantity, 1967-'78.



Source: Derived from data presented in table 14.

Employment

The average number of persons associated with the manufacture of pig iron is shown in table 15.

Table 15.--Average number of production workers for all products, for hot and cold pig iron, and for cold pig iron, 1977-79

Year	Production workers ^{1/}	Pig iron workers	Cold pig iron production workers
1977-----	85,340	2,681	1,519
1978-----	84,205	2,773	1,447
1979-----	85,637	1,911	956

^{1/} Does not include employees of U.S. Steel.

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

The average number of production workers for hot (nonsteelmaking) and cold pig iron decreased from 2,681 in 1977 to 1,911 in 1979, or by 28.7 percent. The average number of production workers for cold pig iron alone decreased from 1,519 in 1977 to 956 in 1979, or by 37.1 percent. Two plants were closed in this time period; U.S. Steel closed its Cleveland plant in September 1978 and Interlake closed its Toledo plant in December 1979.

The man-hours worked by production and related workers producing hot and cold pig iron for four producers were 3.1 million in 1977, 3.1 million in 1978, and 2.1 million in 1979. The man-hours worked by production and related workers producing cold pig iron for six producers were 2.7 million in 1977, 2.9 million in 1978, and 1.9 million in 1979. The man-hours worked by workers making hot and cold pig iron decreased by 33.7 percent from 1977 to 1979, and the man-hours on cold pig iron alone decreased 29.6 percent in the same time period. The changes in man-hours worked also reflect the previously mentioned plant closures.

Productivity, for four hot and cold pig iron producers, as measured by production per man-hour, was 0.431 tons per man-hour in 1977, 0.420 tons in 1978, and 0.337 tons in 1979, for a 21.8 percent decrease from 1977 to 1979. Productivity for six cold pig iron producers was 0.440 tons per man-hours in 1977, 0.365 tons in 1978, and 0.515 tons in 1979, for a 14.6 percent increase from 1977 to 1979.

Wages, for two hot and cold pig iron producers, as measured by cost of direct labor per man-hour, were *** in 1977, *** in 1978, and *** in 1979, for a 12.4 percent increase from 1977 to 1979. Wages for two cold pig iron producers, were *** in 1977, *** in 1978, and *** in 1979, for a 12.9 percent increase from 1977 to 1979.

The Department of Labor has found that increases in imports of articles like or directly competitive with pig iron produced by U.S. Steel at its Central Furnaces plant at Cleveland, by Interlake, Inc. at its Toledo, Ohio, plant, and by Hanna Furnace Corp. at its Buffalo, N.Y., plant and associated facilities, all contributed importantly to the total or partial separation of workers at these plants in 1978, making these workers eligible for trade adjustment assistance. However, the Department of Labor denied earlier requests for trade adjustment assistance for workers at the Buffalo plant of Hanna Furnace Corp. and the Chicago and Toledo plants of Interlake, Inc.

Financial Experience of U.S. Pig Iron Producers

Profit-and-loss experience

Net operating profit of four pig iron producers, representing 75 percent of producers' sales of cold pig iron in 1979, on their overall operations within which pig iron was produced decreased from \$11.2 million in 1977 to a loss of \$5.1 million in 1979, as shown in table 16. Profit as a percent of net sales was 2.6 percent in 1977; losses of 0.8 and 1.1 percent were reported in 1978 and 1979, respectively.

Net operating profit of four pig iron producers on their operations on cold pig iron decreased by 70.2 percent from \$11.9 million in 1977 to \$3.6 million in 1979. The \$3.6 million profit will drop substantially if Cyclops Corp. proceeds with its announced decision to close its plant on May 31, 1980, because the write off will apply to 1979 earnings. Profit as a percent of net sales of cold pig iron was 9.3 percent in 1977, a loss of 1.5 percent in 1978 and a profit of 3.4 percent in 1979. The loss in 1978 primarily reflects the closure of Interlake's Toledo plant. Net sales of cold pig iron declined in this time period from \$129.0 million in 1977 to \$103.4 million in 1979.

The impact of production costs, such as those for raw materials and labor, on pig iron profit is shown in the following ratio of cost of sales to sales:

	<u>Overall operations</u> (Percent)	<u>Cold pig iron</u> (Percent)
1977-----	95.1	87.2
1978-----	98.6	97.5
1979-----	98.9	92.5

The decrease in the above ratio in 1979 for cold pig reflects the closure of Interlake's Toledo plant in 1978 and sales made from its stocks in 1979. Underutilization of capacity has also increased production costs.

According to the largest domestic producer, average costs per ton of pig iron have risen from *** in 1975 to *** in 1979, while overall prices have remained fairly constant.

Table 16.--Profit-and-loss experience of four U.S. producers of pig iron, by types of operations, 1977-79

Item	1977	1978	1979
Total establishment operations			
Net sales-----1,000 dollars--	430,157	485,942	471,102
Cost of sales-----do-----	409,021	479,076	465,695
Gross profit-----do-----	21,136	6,866	5,407
Administrative expenses-----do-----	9,978	10,789	10,550
Net operating profit or (loss)-----do-----	11,158	(3,923)	(5,143)
Other income or (expense)-----do-----	1,499	(13,744)	689
Net profit or (loss) before income taxes-----1,000 dollars--	12,657	(17,667)	(4,454)
Ratio of net operating profit to net sales-----percent--	2.6	(0.8)	(1.1)
Operations on cold pig iron			
Net sales-----1,000 dollars--	128,896	122,983	103,400
Cost of sales-----do-----	112,363	119,862	95,606
Gross profit-----do-----	16,533	3,121	7,794
Administrative expenses-----do-----	4,584	4,944	4,229
Net operating profit or (loss)-----do-----	11,948	(1,824)	3,565
Other income or (expense)-----do-----	489	1/(15,142)	221
Net profit or (loss) before income taxes-----1,000 dollars--	12,437	(16,965)	3,786
Ratio of net operating profit to net sales-----percent--	9.3	(1.5)	3.4

1/ Nonrecurring expense.

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

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

Return on investment and capital expenditures

Table 17 compares book value and replacement value of net assets employed in the production of pig iron with net operating profit and shows that both the ratios of net operating profit to investment decreased or stayed the same in the period from 1977 to 1979.

Table 17.--Investment in productive facilities and net operating profit of four U.S. cold pig iron producers, 1977-79

Item and year	Investment		Ratio of net operating	
	in productive facilities		profit to investment	
	operating		in productive facilities	
	Net book value	Replace-ment or (loss): value	Net	Replacement value
	-----Million dollars-----		Percent	Percent
Overall operations:				
1977-----	285	509	11	3.9
1978-----	301	523	(4)	1/
1979-----	321	550	(5)	1/
Operations on cold pig iron:				
1977-----	55	280	12	21.8
1978-----	48	274	(2)	1/
1979-----	20	250	4	20.0

1/ Negative.

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

Another comparison of financial conditions can be made between the pig iron producers and other industries. The "Forbes Annual Report on American Industry" (Forbes, Jan. 7, 1980), states that the net profit margin, as measured by dividing net profits by net sales, had a median of 4.1 percent for the basic steel industry in 1979, and a median of 5.3 percent for all industry. Since the overall operations producing pig iron had a net loss of 1.1 percent in 1979 and cold pig iron operations had a net profit of 3.4 percent in 1979, this indicates that the domestic pig iron producers are less profitable than the basic steel industry. The basic steel industry is generally acknowledged to have a severe problem in raising capital.

The five producers of cold pig iron had capital expenditures as follows:

	<u>Capital expenditures</u> <u>(1,000 dollars)</u>	<u>Environmental expenditures</u> <u>(1,000 dollars)</u>
1977-----	3,577	3,051
1978-----	7,733	13,139
1979-----	1,629	8,392

Consideration of the Causal Relationship Between Subsidized
Imports and the Alleged Injury

Market share

The ratio of imports of pig iron from Brazil to apparent consumption of merchant pig iron increased from 1.1 percent in 1975 to 8.3 percent in 1979, as shown in table 18.

Table 18.--Pig iron: U.S. imports from Brazil and apparent consumption
of merchant pig iron, 1968-79

Year	Imports from Brazil	Consumption of pig iron	Ratio of imports to consumption
	1,000 short tons	1,000 short tons	Percent
1968-----	33	4,021	0.8
1969-----	0	4,215	-
1970-----	0	3,539	-
1971-----	26	2,867	0.9
1972-----	213	3,531	6.0
1973-----	58	3,743	1.5
1974-----	0	3,124	-
1975-----	26	2,328	1.1
1976-----	129	2,518	5.1
1977-----	127	2,432	5.2
1978-----	198	2,703	7.3
1979-----	184	2,221	8.3

Source: Imports compiled from official statistics of the U.S. Department of Commerce, and consumption from Commission calculations.

The ratio of imports of pig iron from Brazil to apparent consumption of cold pig iron increased from 1.9 percent in 1975 to 17.2 percent in 1979, as seen in table 19.

Table 19.--Pig iron: U.S. imports from Brazil and apparent consumption of cold pig iron, 1968-79

Period	Imports from Brazil	Consumption of pig iron	Ratio of imports to consumption
	---1,000 short tons---		Percent
1968-----	33 :	2,871 :	1.1
1969-----	0 :	2,718 :	-
1970-----	0 :	2,326 :	-
1971-----	26 :	1,975 :	1.3
1972-----	213 :	2,336 :	9.1
1973-----	58 :	2,405 :	2.4
1974-----	0 :	1,711 :	-
1975-----	26 :	1,347 :	1.9
1976-----	129 :	1,358 :	9.5
1977-----	127 :	1,288 :	9.9
1978-----	198 :	1,416 :	14.0
1979-----	184 :	1,069 :	17.2

Source: Imports compiled from official statistics of the U.S. Department of Commerce, and consumption from Commission calculations.

Impact of substitution of scrap for pig iron

Pig iron customers (foundries) have been substituting scrap, which is usually cheaper, for cold pig iron. ^{1/} The Iron Age average (annual) price for No. 1 heavy melting scrap was \$56 per short ton in 1977, \$68 per short ton in 1978, and \$87 per short ton in 1979. This substitution trend has accelerated since 1974, as shown in table 20.

^{1/} See hearing transcript, pp. 117-120.

Table 20.--Consumption of pig iron and iron and steel scrap by iron foundries and miscellaneous users, 1968-78

Year	Consumption of pig iron	Consumption of scrap	Ratio
	1,000 short tons		
1968-----	2,752 :	14,036 :	1:5.1
1969-----	2,903 :	14,833 :	1:5.1
1970-----	2,153 :	13,126 :	1:6.1
1971-----	2,454 :	15,161 :	1:6.2
1972-----	2,873 :	17,292 :	1:6.0
1973-----	3,148 :	18,173 :	1:5.8
1974-----	3,944 :	21,140 :	1:5.4
1975-----	2,746 :	16,322 :	1:5.9
1976-----	2,785 :	18,632 :	1:6.7
1977-----	2,567 :	19,973 :	1:7.8
1978-----	2,672 :	19,896 :	1:7.4

Source: Compiled from official statistics of the U.S. Department of the Interior, Bureau of Mines.

The trend is the result of foundries shifting their raw material input to a 87-88 percent scrap 12-13 percent pig iron ratio, the installation of new furnaces that allow the use of more scrap, and new technology that allowed scrap dealers to produce a more uniform and reliable product.

The question of price undercutting

The Commission, in making a determination with respect to the question of material injury, is required to consider as a specific factor, the price effects of subsidized imports in the relevant market. ^{1/} With regard to evaluating the market impact of prices of subsidized imports of pig iron from Brazil, it is necessary to determine "whether there has been significant price undercutting by the imported merchandise as compared with the price of like products of the United States." ^{2/} Questionnaire responses provided the data source to analyze the price impact of subsidized imports of pig iron from Brazil. These data on actual transaction prices were used to determine margins of price undercutting by the importers of Brazilian pig iron.

In countervailing duty cases, it is presumed in the absence of contrary data, that the alleged subsidies are reflected in export prices. These prices provide the basis for margins of underselling at the market transaction level. Data provided by the administering authority confirms the ranges of Brazilian export prices in table 21, which presents a comparison of the average landed price of imported pig iron, by import source country, at port

^{1/} Trade Agreements Act of 1979 Sec. 771-7(B) (ii) 93 stat. 178.

^{2/} Trade Agreements Act of 1979 Sec. 771-1(C) (ii) (I) 93 stat. 178.

Table 21.--Pig iron: Range of export prices, 1/ average export price, average freight and insurance charges, and average c.i.f. price, port of entry, by import source country, by quarter April 1978-March 1979

(Per short ton)											
Year and quarter	Country of origin	Range of f.o.b. export prices 1/	Average export price 1/	Average freight and insurance charges 2/	Average c.i.f. price : port of entry	Sales commission : /unloading and dock charges 3/	Average landed price, 4/	Average domestic producer price 5/	Estimated importers' average margin of under-selling		
									Dollars per short ton	Percent	
1978 II	Brazil-----	***	104	15	119	***	***	190	***	***	
	Canada-----	***	156	5/	156	***	***	190	***	***	
	Sweden-----	***	99	15	114	***	***	190	***	***	
	Australia-----	-	-	-	-	-	-	-	-	-	
1978 III	Brazil-----	***	105	15	120	***	***	190	***	***	
	Canada-----	***	163	5/	163	***	***	190	***	***	
	Sweden-----	***	69	15	84	***	***	190	***	***	
	Australia-----	-	-	-	-	-	-	-	-	-	
1978 IV	Brazil-----	***	110	15	125	***	***	195	***	***	
	Canada-----	***	151	5/	151	***	***	195	***	***	
	Australia-----	***	133	25	158	***	***	195	***	***	
	Sweden-----	***	67	15	82	***	***	195	***	***	
1979 I	Brazil-----	***	108	17	125	***	***	195	***	***	
	Canada-----	***	160	5/	160	***	***	195	***	***	
1979 II	Brazil-----	-	-	-	-	-	-	-	-	-	
	Canada-----	***	162	5/	162	***	***	195	***	***	

1/ Export prices, port of lading were calculated from selected customs invoices and were converted to price per short ton.

2/ Charges are the average of actual charges as itemized on invoices.

3/ A ** percent sales commission figure only; if unloading and dock charges are absorbed by the importer, the charges to c.i.f. would increase by an average of **/per net ton.

4/ Unloading charges, if absorbed by importer would increase landed price by an average of **/per short ton.

5/ Imports from Canada are shipped by truck or rail and no charge, (freight and insurance) are shown on customs invoices; shipments are "freight collect."

Source: U.S. Customs Service.

of entry. The data are based on entry documents for imported pig iron. These documents provided price data on imports from Brazil, Canada, Sweden, and Australia and covered the period April 1978 to March 1979. ^{1/} Data compiled from these documents, indicate the range of export prices, f.o.b. port of export for pig iron from these principal source countries, and provide a basis for calculating the average export price. Charges for freight and insurance, itemized on each invoice, are the basis for computing average c.i.f. price, port of entry.

The data show that the price advantage of subsidized imported Brazilian pig iron over the domestic product stemmed from roughly a \$90 to \$125 range of export prices per short ton, f.o.b. Vitoria, Brazil. To this base price, the average freight and insurance cost of \$15 to \$17 per short ton must be added to obtain a c.i.f. price, port of entry. The resultant range of c.i.f. value per short ton amounted to \$125 to \$130 per short ton over the four quarters 1978-79 covered by the data.

Figure 4 extends this analysis graphically for the period January 1978 through September 1979. Estimated landed value per ton, is derived by adding discharge and handling costs at port of entry to the average c.i.f. value per ton. These data are based on total entries of Brazilian pig iron, monthly, by port of entry. Discharge and handling costs at U.S. ports of entry for Brazilian pig iron vary from a low of about \$6 per ton at eastern U.S. ports to a high of about \$14 per ton at west coast ports.

Comparing the prices of like and competitive products.--Although pig iron is considered a rather homogeneous product, there are many grades of varied chemical composition and corresponding differences in price. To enable price comparisons of like products, three grades of pig iron, defined by phosphorus content, were selected as representative of the competing range of imported and domestic products.

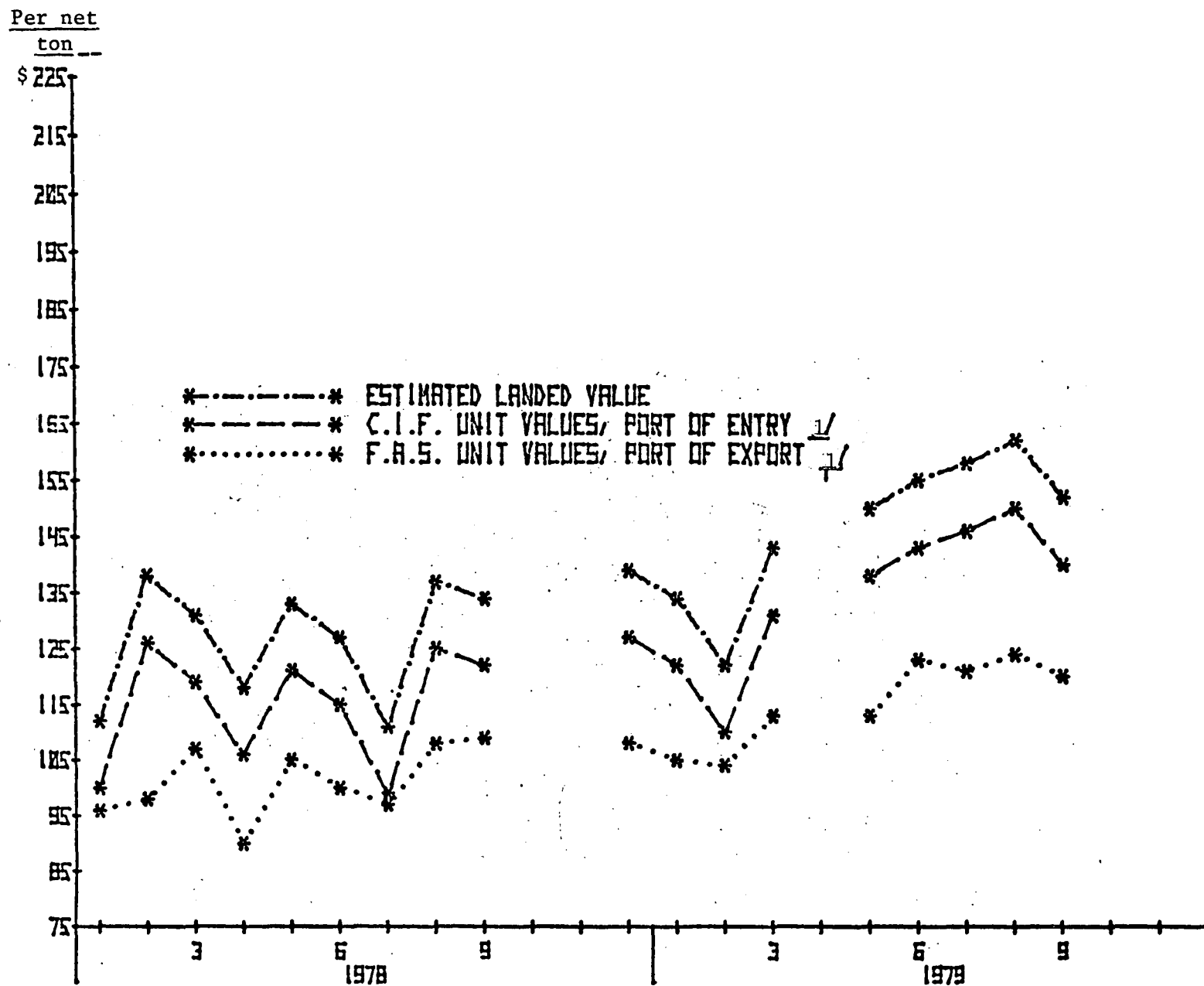
They are: pig iron containing--

- (1) over 0.10 percent phosphorus,
- (2) 0.076 to 0.10 percent phosphorus, and
- (3) under 0.076 percent phosphorus.

These grades, hereinafter, will be referred to as high-phosphorus, medium-phosphorus, and low-phosphorus grades of pig iron, respectively. Treasury's calculation of margins of subsidy did not differentiate between grades of pig iron but rather applied to all grades; this was because the subsidy benefits were available for all grades.

Data on lowest net transaction prices, delivered, were collected for all three grades from both importers and domestic producers. Comparison of import and domestic price trends and the margin of underselling of imports during 1977-79 can be made by market area and in the aggregate for the U.S. market. Margins of underselling of imports from Brazil can also be compared with margins of underselling of pig iron imported from countries other than Brazil.

^{1/} This sample of specific shipments of pig iron to the United States consisted of 121 customs invoices and totaled 289 thousand short tons of pig iron.



^{1/} C.i.f. & F.A.S. values are weighted averages.

Source: U.S. Department of Commerce. IM 145X.

Price data for these three representative grades of pig iron also were received from 65 foundries purchasing pig iron and located throughout the United States, but primarily located in the major industrial areas east of the Mississippi. Those price data enable similar comparisons of price trends and import margins of underselling.

Transaction prices of pig iron imported from Brazil and of domestic pig iron substantiate a pattern of significant margin of underselling by imports during almost the entire period 1977-79. In dollar term, these margins averaged from \$40 to \$77 per short ton or from 19% to 39%. Only in the last two quarters of 1979 did margins narrow appreciably, and only then in certain market areas. Margins of underselling did vary from one market area to another.

The broadest market coverage for imports of pig iron from Brazil is in the medium-phosphorus grade. High-phosphorus Brazilian pig iron also competes strongly, but in fewer market areas. Importers' price data on low-phosphorus grade reflects minimal market coverage by Brazilian pig iron.

Import prices of pig iron from countries other than Brazil, for the most part, reflect insignificant margins of underselling, if any. Imported pig iron from Canada, a major source of total imports, is sold at prices approximating or only slightly below domestic prices. At times, however, imports from other source countries have disrupted the market with low prices. Pig iron from Sweden (high-phosphorus grade) was sold at margins of \$75 to \$94 per ton below domestic prices in the West Central States from mid 1977 to early 1979. Low-phosphorus pig iron from Australia was sold in both northern and southern markets at margins of \$33 to \$59 per ton during most of 1977-79.

The high-phosphorus Swedish pig iron may have displaced imports from Brazil as well as domestic pig iron; ***

The low-phosphorus pig iron from Australia competed with domestic product rather than with pig iron from Brazil. In neither case was the price competition as pervasive in market coverage or the tonnage as significant as medium-phosphorus pig iron imported from Brazil, which accounts for about 90 percent of total imports of Brazilian pig iron. Because of the relative unimportance of high-phosphorus and low-phosphorus Brazilian pig iron in tonnage terms, the margin of underselling analysis focuses on the medium phosphorus grade.

Margin of underselling of medium-phosphorus pig iron imported from Brazil.--Table 22 presents the respective margin of underselling for medium-phosphorus pig iron imported from Brazil. The margins are shown in dollar amounts and in percent and are based on weighted average lowest net transaction prices of importers and domestic producers. (For transaction price comparisons by market area and grade, see appendix E.)

Competition from medium-phosphorus pig iron imported from Brazil encompasses three contiguous market areas of the eastern United States, plus the Pacific Coast States. The margins of underselling vary significantly by

Table 22.--Pig iron containing 0.076 to 0.10 percent phosphorus: Average margin of underselling by imports from Brazil compared with U.S. producers' product, based on average lowest net transaction prices, delivered to customers in 7 general U.S. market areas, by 2-month periods 1977-79.

A EXPORTER, B PRODUCT

Period	Market area I (Northeast)		Market area II (North-central and Eastern)		Market area III (West-central)		Market area IV (Ohio Valley)		Market area V (Southeast)		Market area VI (Southwest)		Market area VII (Pacific Coast)	
	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
	amount		amount		amount		amount		amount		amount		amount	
1977														
January-February	***	15	-	-	***	12	-	-	***	7	-	-	***	18
March-April	***	15	***	10	-	-	-	-	***	9	-	-	***	18
May-June	***	18	***	12	-	-	-	-	***	15	-	-	***	18
July-August	***	17	***	12	-	-	-	-	***	6	-	-	***	18
September-October	***	22	***	12	-	-	-	-	***	13	-	-	***	18
November-December	***	20	***	8	***	25	-	-	***	5	-	-	***	12
1978														
January-February	***	20	***	11	***	23	-	-	***	3	-	-	***	8
March-April	***	20	***	12	***	21	-	-	-	-	-	-	***	8
May-June	***	20	***	16	***	27	-	-	-	-	-	-	***	8
July-August	***	22	***	10	***	10	-	-	-	-	-	-	***	3
September-October	***	17	***	9	***	14	-	-	-	-	-	-	***	-
November-December	***	17	***	-	***	25	-	-	-	-	-	-	***	3
1979														
January-February	***	22	***	10	***	28	-	-	-	-	-	-	***	-
March-April	***	23	***	7	***	9	-	-	-	-	-	-	***	11
May-June	***	18	***	2	***	11	-	-	-	-	-	-	***	11
July-August	***	13	***	5	***	13	-	-	-	-	-	-	***	11
September-October	***	9	***	2	***	12	-	-	-	-	-	-	***	11
November-December	***	9	***	4	***	16	-	-	-	-	-	-	***	-

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

market area. Margins of underselling of \$40 to \$50 per ton (22-26 percent) existed in the West Central States from late 1977 to early 1979. By year-end 1979, imported pig iron from Brazil still undersold the domestic product by \$32 per ton, or 16 percent. In the Northeast, Brazilian medium phosphorus pig iron undersold the domestic product by an average of \$42 per ton from September 1977 through June 1979. During the last half of 1979 the margin slimmed to a level of 9 to 13 percent, or about \$20 per ton.

The medium-phosphorus grade margin of underselling in the North Central and Eastern States from March 1977 to May 1979 was erratic, ranging from a low of \$12 per ton to a high of \$31 per ton and averaging about 12 percent. In the Pacific Coast market, medium-phosphorus pig iron from Brazil competes with domestic product produced in Birmingham, Ala. The margin of underselling by the Brazilian imported pig iron declined from \$36 per ton in 1977 to \$16 per ton in 1978, but increased during 1979 to \$23 per ton for a price advantage of 11 percent.

Price data from foundries confirm substantial margins of underselling by imports of medium-phosphorus pig iron from Brazil. Purchasers' price data compiled from responses to Commission's questionnaires indicate that medium-phosphorus pig iron imported from Brazil was purchased by foundries in the four major industrial market areas as shown in Table 23. Margins of underselling varied by market area, with the highest average margins occurring in the Northeast, the Eastern and North Central States and the West Central States. In these markets, margins of underselling ranged from \$28 to \$46 per ton in 1978, but the margins decreased in 1979 to range from \$17 to \$32 per ton. In the Ohio Valley, the margin of underselling was less, ranging from a high of \$20 to \$30 per ton in 1978 to a low of \$7 per ton in July-December 1979.

Based on price data from importers, and from purchasers, pig iron imported from countries other than Brazil appears in competition with domestic product only during July-December 1979 (app. E). The margin of underselling was about \$20 per ton or nearly 10 percent. According to questionnaire response data from purchasers, medium-phosphorus pig iron imported from countries other than Brazil--mainly from Canada and Australia--was purchased by Northeastern States foundries at virtually the same prices as that purchased from domestic sources, (app. E).

The question of price depression or suppression

The Trade Act also mandates the Commission in its evaluation of the effect of subsidized imports on prices to determine "whether . . . the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree." 1/ Thus, an analysis is required of the extent, if any, to which prices of subsidized imports of Brazilian pig iron have suppressed or depressed domestic producer prices.

1/ Trade Agreements Act of 1979, sec. 771, 7C(ii)(II) 93 Stat. 178.

Table 23.--Pig iron containing 0.076 to 0.10 percent phosphorus: Average margin of underselling by imports from Brazil compared with U.S. producers' product, based on average lowest net purchase by foundries, delivered to customers in 7 general U.S. markets, by quarters, 1977-79.

Period	Market area I (Northeast)		Market area II (North-central: and Eastern)		Market area III (West-central):		Market area IV (Ohio Valley)		Market area V (Southeast)		Market area VI (Southwest)		Market area VII (Pacific Coast)	
	Dollars:	Percent:	Dollars:	Percent:	Dollars:	Percent:	Dollars:	Percent:	Dollars:	Percent:	Dollars:	Percent:	Dollars:	Percent:
	amount	:	amount	:	amount	:	amount	:	amount	:	amount	:	amount	:
1977														
January-March-----	***	13	-	***	-	***	11	-	-	-	-	-	-	-
April-June-----	***	12	***	19	***	19	***	11	-	-	-	-	-	-
July-September-----	***	13	***	18	***	16	***	13	-	-	-	-	-	-
October-December-----	***	13	***	19	***	19	***	14	-	-	-	-	-	-
1978														
January-March-----	***	18	-	18	***	18	***	15	-	-	-	-	-	-
April-June-----	***	18	***	18	***	20	***	14	-	-	-	-	-	-
July-September-----	***	17	***	14	***	22	***	15	-	-	-	-	-	-
October-December-----	***	16	***	15	***	17	***	14	-	-	-	-	-	-
1979														
January-March-----	***	15	-	14	***	16	***	13	-	-	-	-	-	-
April-June-----	***	14	***	11	***	14	***	12	-	-	-	-	-	-
July-September-----	***	11	***	9	***	15	***	3	-	-	-	-	-	-
October-December-----	***	12	***	8	***	9	***	3	-	-	-	-	-	-

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

Price suppression.--Merchant pig iron prices have increased only slightly during 1975-79. Labor Department statistics on the prices of malleable pig iron show that the price of this grade, representative of the domestic pig iron prices in general, has been remarkably stable in the past 5 years. This price index is graphically presented in figure 5 and is summarized in the following tabulation:

<u>Period</u>	<u>Index</u>
January 1975-----	100
April 1975-----	101
September 1977-----	109
August 1978-----	116
December 1979-----	116

The wholesale price index and the price index for foundry-forge products increased 43 percent and 48 percent, respectively, during this same period. Only three pig iron price increases occurred during the entire period, for a total increase of 16 percent.

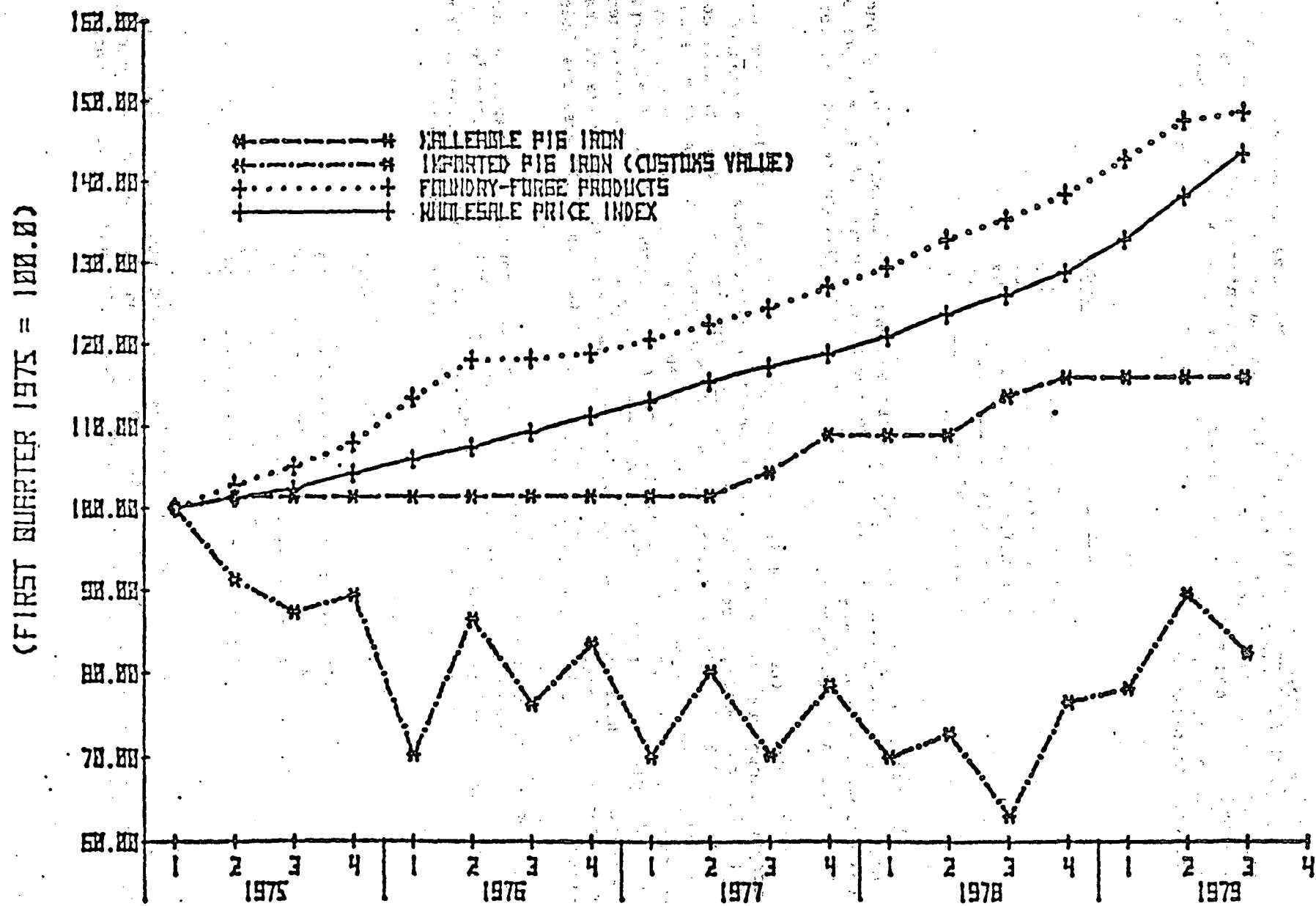
Published prices of malleable grade pig iron (which contains over 0.10 percent phosphorus) as reported by the American Metal Market are presented in table 24, and indicate each merchant pig iron producer's prices for malleable pig iron, 1975-79. The published prices of this grade held firm from January 1975 until the fourth quarter of 1977, when prices of five of the seven merchant pig iron producers increased between 5.5 percent (U.S. Steel Corp.) and 7.3 percent (Interlake Inc. and Empire-Detroit Steel). No subsequent increases in published prices have occurred. Hearing testimony revealed that an attempted increase in domestic published prices in 1978 was rescinded because of low-priced imports from Brazil.

Sharply rising prices for major inputs in the production of pig iron also point up the depressed price level of merchant pig iron. According to confidential domestic producers cost data, input prices increased from December 1975 to December 1979, as shown in the following tabulation:

<u>Inputs</u>	<u>Percent</u>
Iron ore-----	39
Limestone-----	16
Coke-----	30
Fuel (oil)-----	72
Labor-----	55

Consequently, the price of pig iron has not kept pace with rising costs. Data on output per man-hour calculated from questionnaire responses indicate that increased productivity has not offset input cost increases to any appreciable extent.

Figure 5.--Selected price indexes: Malleable pig iron, imported pig iron (customs value, foundry-furnace products, wholesale price index, by quarters, 1975-79



Source: Compiled from official statistics of the U.S. Departments of Labor and Commerce.

Table 24.--Pig iron: Prices of domestic pig iron, malleable grades, 1/ by merchant pig iron producers, and by quarters, 1975-79

		(Per net ton)																			
Producer	Location	1975				1976				1977				1978				1979			
		Jan.-	April-	July-	Oct.-	Jan.-	April-	July-	Oct.-	Jan.-	April-	July-	Oct.-	Jan.-	April-	July-	Oct.-	Jan.-	April-	July-	Oct.-
		Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.
Empire--Detroit--	Portsmouth, Ohio.	-	-	-	-	-	-	-	-	-	\$178	\$178	\$191	\$191	\$191	\$191	\$191	\$191	\$191	\$191	
Interlake-----	Chicago, Ill.	\$178	\$178	\$178	\$178	\$178	\$178	\$178	\$178	\$178	178	178	191	191	191	203	203	203	203	203	
	Toledo, Ohio	178	178	178	178	178	178	178	178	178	178	178	191	191	191	203	203	203	203	203	
Shenango-----	Neville	181	181	181	181	181	181	181	181	181	181	181	190	190	190	190	190	190	190	190	
	Island, Pa.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Sharpsville, Pa.	181	181	181	181	181	181	181	181	181	181	181	190	190	190	190	190	190	190	190	
Jim Walter Resources-----	North Birmingham, Ala.	181	181	181	181	181	181	181	181	181	181	181	191	191	191	191	191	191	191	191	
	Ala.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Hanna Furnaces----	Buffalo, N.Y.	191	191	191	191	191	191	191	191	191	191	191	191	191	191	203	203	203	203	203	
U.S. Steel-----	Cleveland, Ohio.	180	180	180	180	180	180	180	180	180	180	180	190	190	190	203	203	203	203	203	
	Geneva, Utah	190	190	190	190	190	190	190	190	190	190	190	190	190	190	203	203	203	203	203	
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

1/ Price of malleable grade is considered to be representative of domestic pig iron prices in general.

Source: As reported in various issues of the American Metal Market.

Domestic merchant pig iron producers freely admit that the depressed market coupled with import competition has created a demand and supply situation in which discounts from published prices have been and are currently the rule rather than the exception. Discounts, as noted, are estimated to be in the range of 5 to 15 percent.

Discounts from published prices are a further indication of the price depressing effect of the soft market and import price pressure. Transaction price data show domestic prices discounted as much as 20 percent below published price during 1977-79. Domestic price on occasion has been as low as *** to *** per ton in 1978 and 1979 in the eastern and southern markets. On the Pacific Coast, discounts have been negligible. An average discount of 10 to 15 percent in other market areas appears frequently in transaction price data (app. E).

The combined price depressing and suppressing effect of the shrinking market for pig iron and the price pressure of imports from Brazil and, on occasion, imports from Sweden and Australia, are evidenced in the discount pattern of domestic transaction prices and the lag in domestic published price increases compared with increases in cost.

Reasons for purchasing imported pig iron over U.S.-produced pig iron.--Purchasers of pig iron from Brazil and from other countries were surveyed by questionnaires as to the relative importance of factors that influenced the purchasing decision to buy imported pig iron over the U.S. products. The survey data are aggregated in table 25.

Purchasers of Brazilian pig iron cited price as the most important factor in their decision. Availability and quality were distant seconds as reasons for purchasing the imported product. Of the 42 purchasers listing price as a factor, 83 percent rated it as "very important." Contrary to hearing testimony, purchasers of pig iron from Brazil rated the "alternative source" factor as of little relative importance. Purchasers of pig iron from countries other than Brazil ranked price, quality, and availability almost equally in relative importance in import purchasing decisions. Alternative source as a factor was a more important factor in these import purchase decisions than in the purchase of imported pig iron from Brazil. These rankings indicate the strong importance of price as a determinant factor in purchasing imports from Brazil.

Lost sales.--Domestic producers were requested to provide data on loss of established customer accounts (whole or partial) or failure to obtain new customers due to imports of pig iron from Brazil. The questionnaire response data are aggregated in table 26.

Table 25.--Reasons for purchasing imported pig iron from Brazil and other source countries over U.S.-produced pig iron

Reasons	Aggregate responses quantifying decisionmaking factors--										
	Number and category of responses						Level of importance				
	Very important	Mid-range		Not at all important	Total		Very important	Mid-range		Not at all important	Total
	(5)	(4)	(3)	(2)	(1)		(5)	(4)	(3)	(2)	(1) percent
<u>Imports from Brazil</u>	<u>Number of responses</u>						<u>Percent</u>				
Alternative source-----	7	4	9	4	12	36	19.4	11.1	25.0	11.1	33.3
Availability-----	19	6	7	2	6	40	47.5	15.0	17.5	5.0	15.0
Price-----	35	3	3	0	1	42	83.3	7.1	7.1	-	2.4
Quality-----	19	9	4	3	2	37	51.4	24.3	10.8	8.1	5.4
Other-----	6	0	1	0	3	10	60.0	-	10.0	-	30.0
Total-----	86	22	24	9	24	165	52.1	13.3	14.5	5.5	14.5
<u>Imports from countries other than Brazil</u>											
Alternative source-----	9	3	4	4	3	23	39.1	13.0	17.4	17.4	13.0
Availability-----	14	2	3	1	5	25	56.0	8.0	12.0	4.0	20.0
Price-----	17	2	3	1	5	28	60.7	7.1	10.7	3.6	17.9
Quality-----	15	6	2	1	2	26	57.7	23.1	7.7	3.8	7.7
Other-----	2	0	0	0	1	3	66.7	-	-	-	33.3
Total-----	57	13	12	7	16	105	54.3	12.4	11.4	6.7	15.2

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

Table 26.--Pig Iron: Domestic sales lost to imports from Brazil, actual values of lost accounts, by producers, 1977-79

(In thousands of dollars)			
Producer	1977	1978	1979
Cyclops-----	***	***	***
Shenango-----	***	***	***
Interlake-----	***	***	***
U.S. Steel-----	***	***	***
Hanna Furnace-----	***	***	***
Jim Walters-----	***	***	***
Total-----	26,418	8,083	4,600

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

Data obtained from purchasers' questionnaire responses tend to verify the incidence and the value of lost sales in those cases in which the Commission's sample of purchasers included some of the same foundries listed by producers as implicated in lost sales. In cases not covered by purchasers' questionnaires, ITC staff contacted firms listed as large volume lost sales. The level of dollar volume lost to imports from Brazil was corroborated in most instances.

In a few instances, a high-volume lost sale was attributable to imports not simply from Brazil, but in part to low-priced imports from other source countries, e.g. Sweden, as noted elsewhere in this report. In a few other cases, the listed foundry had significantly diminished the ratio of pig iron to scrap used, by adopting new furnace technology after initially switching from domestic pig iron to Brazilian pig iron earlier in 1977-79. Documents such as sales reports, noting specific instances of lost sales, were provided by some domestic producers in support of their compilation of lost sales. An example of the price depressing effect and loss of revenue involved in a specific domestic sale at a discounted price was provided by Interlake. This *** ton sale at *** per net ton, made *** 1979, to *** represented a loss of revenue of about *** for that domestic producer. Price data collected by the Commission staff reflect widespread discounting and resultant loss of revenue by domestic producers in meeting competition from Brazilian pig iron.

APPENDIX A

TREASURY'S LETTER NOTIFYING THE COMMISSION OF
BOUNTIES AND GRANTS



B-2
THE GENERAL COUNSEL OF THE TREASURY
WASHINGTON, D.C. 20220

RECEIVED

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OFFICE OF THE SECRETARY
U.S. INTL. TRADE COMMISSION

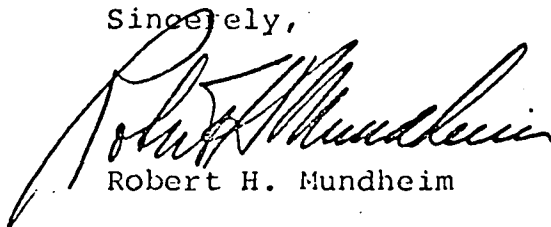
Dear Mr. Chairman:

In accordance with section 303(b) of the Tariff Act of 1930, as amended, you are hereby advised that a bounty or grant is being paid with respect to pig iron imported from Brazil and entered under TSUS item number 607.1500, which merchandise from said country is accorded duty-free treatment.

Attached is a copy of the notice of "Final Counter-vailing Duty Determination" in this case which sets forth the bases of my decision. The U.S. Customs Service will make available to the U.S. International Trade Commission as promptly as possible its files on the instant bounties being paid or bestowed for the Commission's use in the investigation as to whether an industry in the United States is being, or likely to be, injured, or is prevented from being established by reason of the importation of this merchandise into the United States.

Because some of the data in this file is regarded by Customs to be of a confidential nature, it is requested that the Commission consider all information therein contained for the official use of the Commission only, and not to be disclosed to others without prior clearance from Customs.

Sincerely,



Robert H. Mundheim

The Honorable
Joseph O. Parker
Chairman, U.S. International
Trade Commission
Washington, D.C. 20436

Attachment

DOCKET NUMBER
71615
Office of the Secretary Intl. Trade Commission

4810-22

DEPARTMENT OF THE TREASURY
UNITED STATES CUSTOMS SERVICE

PIG IRON FROM BRAZIL

FINAL COUNTERVAILING DUTY DETERMINATION

AGENCY: U.S. Customs Service, Treasury Department

ACTION: Final Countervailing Duty Determination

SUMMARY:

This notice is to inform the public that a countervailing duty investigation has resulted in a determination that the Government of Brazil has provided benefits which constitute bounties or grants on the manufacture, production or exportation of pig iron. Because this merchandise enters the United States free of duty, this case is being referred to the U.S. International Trade Commission for a determination whether an industry in the United States is being, or is likely to be, injured by reason of the imports of such merchandise. Liquidation of entries of this merchandise will be suspended pending the Commission's injury determination.

EFFECTIVE DATE:

(Date of publication in Federal Register).

FOR FURTHER INFORMATION CONTACT:

Michael Ready, Operations Officer, Technical Branch,
Duty Assessment Division, Office of Operations, United States

Customs Service, 1301 Constitution Avenue, N.W., Washington, D.C. 20229, telephone (202) 566-5492.

SUPPLEMENTARY INFORMATION:

On June 4, 1979, a "Preliminary Countervailing Duty Determination" was published in the Federal Register (44 FR 32062). The notice stated that it had been preliminarily determined that benefits conferred by the Government of Brazil upon the manufacture, production, or exportation of pig iron constitute the payment or bestowal of bounties or grants, directly or indirectly, within the meaning of section 303 of the Tariff Act of 1930, as amended (19 U.S.C. 1303) (referred to in this notice as the "Act").

For purposes of this notice, "pig iron" includes merchant pig iron of basic, foundry, malleable, and low phosphorous grades, and is classified under item number 607.1500 of the Tariff Schedules of the United States Annotated (TSUSA).

The preliminary determination identified several programs administered by the Government of Brazil which it had been determined constitute a bounty or grant. Additional information has been received and analyzed concerning those programs, on which this final determination is based.

(1) Excessive remission upon export of the Industrial Products Tax (IPI). Under this program, an exporter receives on export not only the remission of the IPI tax, a value-added tax, which would otherwise be paid on the product and its

components, but also an additional credit which can be used to pay other taxes due or, subject to certain conditions, traded in for cash or transferred to other companies.

The remission of the IPI tax, as such, is not regarded as a bounty or grant. The extra credit, to the extent it exceeds indirect taxes borne by the product or its components is so regarded. The availability of IPI credits for all Brazilian exports is currently being phased out; the present rate applicable to benefits for pig iron is 15 percent of the value of the product involved. However, to the extent the credit includes a rebate for indirect taxes borne by components, in the exported product, the benefit of the subsidy is reduced by an equivalent amount. In this case, the benefit is reduced by the amount of indirect ad valorem taxes borne by wood used to make charcoal and on the charcoal itself, which is, in turn, used to supply the carbon component of the finished product. Most of the charcoal used in the production of pig iron is as an energy component or as a reducing agent. For neither of these functions would it be regarded as "physically incorporated" in the final product for purposes of the law. But for the portion used to supply carbon, calculated to be 5.8% of the total charcoal used, a reduction of 0.5% ad valorem of the subsidy is proper.

Moreover, the actual value of the IPI credit varies depending on whether it is based on the c.i.f. or f.o.b. value of the exported product. The ad valorem benefit is either 13.8 percent of the c.i.f. value or 15.8 percent of the f.o.b. value of the exported pig iron, with a weighted-average benefit of 15.2 percent.

In addition, the exporters claimed an offset for the depreciation of the value of the IPI credits received due to the delay in receiving their value in cash after the export of the goods on which the credits are based. Such an offset would be permissible only if the Government of Brazil mandated a specific waiting period for the receipt of the credits, which is not the case. Furthermore, no offset was given for the portion of the IPI credit which may be lost by a company since IPI credits are treated as income for tax purposes. It is not appropriate, in the context of a countervailing duty investigation, to evaluate the tax status of a government subsidy.

(2) Working capital financing available under Resolution 515 at rates lower than those commercially available (previously identified in the preliminary determination as benefits under Resolution 398). Companies are declared eligible to receive loans under this program by CACEX (the Department of Foreign Commerce of the Banco de Brasil) and may then obtain low-interest loans from commercial banks at 8.7 percent/ yielding an effective rate of 13 percent. Companies using this program can obtain financing of up to 30 percent of the value of the firm's previous year's exports. The countervailable benefit is associated with the difference between the effective interest rate paid and that commercially available in Brazil, which is estimated at 26 percent which, with adjustments, is determined to be 41 percent.

In view of the inflation rate in Brazil that presently exceeds 50 percent and the fact that short-term Brazilian government securities bear interest rates of more than 40 percent, consideration was given to the propriety of continuing to use the 26.4 percent rate, applied in a number of other cases affecting Brazilian imports, as reflective of a "commercial" rate of interest. Based upon the investigation in this proceeding, it appears that this rate is generally available to industrial enterprises in Brazil who borrow funds from the Banco de Brazil. The latter bank is a hybrid private, commercial bank and an arm of the Central Bank of Brazil. One of its functions in its latter role is to serve as the repository for the funds that the Central Bank's reserve requirements mandate. These reserves must be deposited by commercial banks on an interestfree basis. Therefore, they form a significant pool of money from which the Banco de Brazil can profitably lend funds at a rate of 26.4 percent. Since such loans are not restricted to export sales and are generally available to a broad spectrum of Brazilian industry, the rate does serve as a proper benchmark for the "commercially available" interest rate to industrial borrowers in Brazil. However, in addition to the interest rate of 26.4 percent, borrowers are required to maintain compensating balances with the Banco de Brazil and to pay a tax on domestic banking transactions that increase the effective rate of interest to 41 percent. It is, therefore, the latter rate that has been used in calculating the amount of preferential interest rate received by pig iron producers receiving benefits under Resolution 515.

Benefits for individual companies investigated range from 1.0 percent to 14.7 percent, with a weighted-average benefit of 6.5 percent ad valorem.

(3) Preferential export financing under Resolution 331.

This involves advances of Brazilian cruzeiros for up to 180 days against foreign exchange contracts and receivables, at varying interest rates all of which are less than those commercially available. As with the Resolution 515 financing program, the difference between the commercial rate and the one paid under the Resolution 331 program is regarded as a countervailable benefit. The benefits under this program for the companies investigated ranged from zero to 11.7 percent, with a weighted-average benefit of 2.5 percent ad valorem.

(4) Reduction in taxable income by the percentage of total sales accounted for by export sales. No countervailable benefit has been granted to producers of pig iron in view of the fact that the IPI credits, which, as noted above are treated as income, in the case of the pig iron producers account for their entire profits. Since the entire credit constituting an excessive rebate of taxes is regarded as countervailable, it would not be appropriate to add the same benefit under this program in calculating the total subsidy.

(5) Benefits under the "Entrepoto Aduaneiro" system, which permits small producers of pig iron to receive a remission of both the IPI tax and tax credits. Treasury has concluded that while one trading company is eligible for such benefits, the program has not been used. Therefore, no countervailable benefit is determined to exist.

It was also preliminarily determined that certain additional programs have not been utilized by Brazilian manufacturers of pig iron and therefore, did not constitute a countervailable benefit. Further information has corroborated this conclusion, and it is, therefore, finally determined that the following programs do not constitute bounties or grants:

(1) Excessive remission on export of indirect taxes other than IPI, including a transportation tax.

(2) Preferential export financing provided under Resolution 68.

(3) Preferential financing provided for the storage of goods under Resolution 330.

(4) Special tax credits available to firms located in Brazil's less developed regions.

(5) Accelerated depreciation for plant and equipment manufactured in Brazil.

(6) Exemption from payment of Customs duties and value-added taxes on plant and equipment imported for the production of pig iron for export.

As a result of the conclusions described above, it is hereby determined that the Government of Brazil has paid bounties or grants to producers and exporters of pig iron. In accordance with section 303 of the Act and until further notice, the net amount of such bounties or grants has been estimated to range from 18.1 percent to 37.5 percent ad valorem

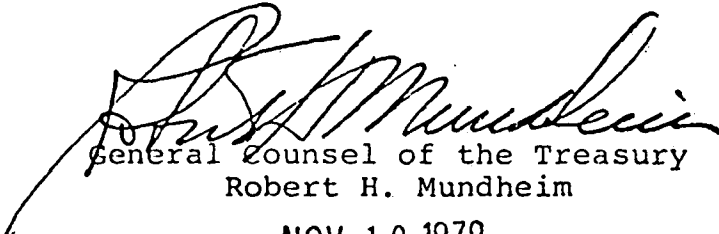
for the various companies investigated, with a weighted-average benefit of 24.3 percent ad valorem. Should countervailing duties be assessed in this case, the amounts due are indicated on an individual company basis in the Appendix to this notice. Those firms not listed in the Appendix and exporting the subject merchandise would be assessed a countervailing duty equal to the overall weighted-average benefit of 24.3 percent ad valorem, until evidence is received in satisfactory form indicating some other rate is more appropriately applied.

The merchandise found to benefit from the bounty or grant enters the United States under item number 607.1500 of the Tariff Schedules of the United States Annotated. This merchandise is duty free. In accordance with section 303(a)(2) of the Act (19 U.S.C. 1303(a)(2)), countervailing duties may not be imposed upon any article or merchandise which is free of duty in the absence of a determination by the U.S. International Trade Commission that an industry in the United States is being, or is likely to be, injured, or is prevented from being established, by reason of the importation of such article or merchandise into the United States. Accordingly, the International Trade Commission is being advised of this determination, and the liquidation of entries, or of withdrawals from warehouse, for consumption of the duty-free pig iron in question will be suspended pending the determination

of the Commission. Accordingly, effective on or after the date of publication of this Notice in the Federal Register, and until further notice, upon the entry, or withdrawal from warehouse, liquidation will be suspended pending the determination of the U.S. International Trade Commission. Security in the amounts indicated in the Appendix and in this Notice will be required of all further imports.

This determination is published pursuant to section 303 of the Tariff Act of 1930, as amended (19 U.S.C. 1303).

Pursuant to Reorganization Plan No. 26 of 1950 and Treasury Department Order 101-5, May 1979, the provisions of Treasury Department Order 165, Revised, November 2, 1954, and section 159.47 of the Customs Regulations (19 CFR 159.47), insofar as they pertain to the issuance of a final counter-vailing determination by the Commissioner of Customs, are hereby waived.



General Counsel of the Treasury
Robert H. Mundheim

NOV 19 1979

APPENDIX B

COMMISSION'S NOTICE OF INVESTIGATION AND HEARING

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C.

303-TA-12

PIG IRON FROM BRAZIL

Notice of Investigation and Hearing

Having received advice from the Department of the Treasury on November 20, 1979, that bounties or grants are being paid with respect to pig iron imported from Brazil, entered duty free under item 607.15 of the Tariff Schedules of the United States, the U.S. International Trade Commission, on December 3, 1979, instituted investigation No. 303-TA-12 under section 303 of the Tariff Act of 1930, as amended (19 U.S.C. 1303) (the countervailing duty law), to determine whether an industry in the United States is being or is likely to be injured, or is prevented from being established, by reason of the importation of such merchandise into the United States.

Conduct of the investigation under the Trade Agreements Act of 1979.

Under the countervailing duty law, the Commission is required to notify the Treasury Department of its determination in this investigation not later than 3 months after receiving Treasury's advice, in this case not later than February 20, 1980. However, the countervailing duty law has been amended in part and supplemented in part by sections 101-103 of the Trade Agreements Act of 1979 (Public Law 96-39, 93 Stat. 144, July 26, 1979). Section 101 of the

act establishes a new title VII of the Tariff Act (sec. 701, et seq.; 19 U.S.C. 1671, et seq.) providing new (supplemental) countervailing duty provisions. Section 102 treats with investigations pending as of the effective date of the new title VII provisions (January 1, 1980, assuming that certain conditions set forth in secs. 2 and 107 of the Trade Agreements Act are fulfilled as of that date). Section 103 amends the present law (sec. 303 of the Tariff Act) in several specific respects to take into account new title VII of the Tariff Act.

Assuming that the new law becomes effective on January 1, 1980, the Commission will be required, under section 102 of the Trade Agreements Act, to terminate this investigation, institute a new investigation under subtitle A of title VII of the Tariff Act, and complete the new investigation within 75 days after January 1. On the assumption that the new law will become effective on January 1, 1980, the procedures described below will be followed in the present investigation.

Hearing. A public hearing in connection with the investigation will be held on Wednesday, February 6, 1980, in the Commission's Hearing Room, U.S. International Trade Commission Building, 701 E Street NW., Washington, D.C. 20436, beginning at 10 a.m., e.s.t. Requests to appear at the public hearing should be filed in writing with the Secretary to the Commission not later than the close of business (5:15 p.m., e.s.t.), January 30, 1980. (If it appears that the new countervailing duty provisions will not become effective on January 1, 1980, a notice rescheduling the hearing (and related prehearing report and statements) for an earlier date will be issued.)

Prehearing statements. The Commission will prepare and place on the record by January 16, 1980, a staff report containing preliminary findings of fact. Parties to the investigation should submit to the Commission a prehearing statement not later than January 29, 1980. The content of such statement should include the following:

- (a) Exceptions, if any, to the preliminary findings of fact contained in the staff report;
- (b) Any additional or proposed alternative findings of fact;
- (c) Proposed conclusions of law;
- (d) Any other information and arguments which a party believes relevant to the Commission's determination in this investigation; and
- (e) A proposed determination for adoption by the Commission.

Collection and confidentiality of information. Requests for confidential treatment of information submitted to the Commission should be directed to the attention of the Secretary. Requests must conform to the requirements of section 201.6 of the Commission's Rules of Practice and Procedure (19 CFR 201.6).

Information submitted to or gathered by the Commission in conjunction with this proceeding under present section 303 of the Tariff Act will be subject to the new countervailing duty law provisions regarding access to information set forth in new title VII of the Tariff Act after January 1, 1980, if that law becomes effective. Those provisions relate to the collection and retention of information by the Commission and the maintenance of confidentiality or the disclosure of information. The provisions of section 777 of title VII will require the following:

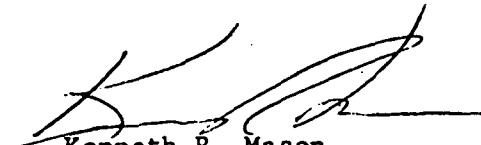
- (a) A record of all ex parte meetings between interested parties or persons providing factual information in connection with an investigation and the Commissioners, their staffs, or any person charged with making a final recommendation in an investigation;

- (b) Disclosure of nonconfidential information or nonconfidential summaries of confidential information which is not in a form that can be associated with or used to identify the operations of a particular person;
- (c) Preventing disclosure of confidential information unless the party submitting the information consents to the disclosure; and
- (d) Limited disclosure of certain confidential information under protective order or by an order of the U.S. Customs Court.

Section 516A of the Tariff Act, as added by the Trade Agreements Act, will require all information in the record before the Commission in the title VII investigation, whether confidential or nonconfidential, to become part of the record before the Customs Court in any review of a Commission determination. Section 771 provides definitions applicable to title VII.

These procedures are set forth pursuant to section 335 of the Tariff Act, which authorizes the Commission to adopt such reasonable procedures as are necessary to carry out its functions and duties.

By order of the Commission.



Kenneth R. Mason
Secretary

Issued: December 4, 1979

APPENDIX C

TREASURY'S LETTERS REVISING THE SIZE OF
THE NET BOUNTIES OR GRANTS



DEPARTMENT OF THE TREASURY
OFFICE OF THE GENERAL COUNSEL
WASHINGTON, D.C. 20220

DEC 31 1979

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JAN 3 1980

OFFICE OF THE SECRETARY
U.S. INTL. TRADE COMMISSION

Dear Mr. Mason:

On November 20, 1979, the Treasury Department published in the Federal Register its final determination that benefits were being conferred on pig iron from Brazil which constituted the bestowal of bounties or grants under the countervailing duty law (44 FR 67554).

One of the three programs determined by the Treasury to constitute the bestowal of a bounty or grant was the excessive remission upon export of the Industrial Products Tax (IPI). In a letter from the Brazilian Embassy dated December 20, 1979, the Government of Brazil notified the Treasury that the excessive remission of the IPI was being eliminated for all Brazilian exports on or after December 7, 1979, including pig iron.

As a result of this action by the Brazilian Government, the Treasury has revised the size of the net bounties or grants found with respect to each of the 16 companies originally investigated as well as the overall weighted-average benefit. The attached sheet lists the new rates applicable to those companies and overall.

I hope that this information will be useful in the International Trade Commission's investigation concerning the possible injury or likelihood of injury caused by the subsidized Brazil pig iron imports.

Sincerely,

Richard B. Self
Director

Office of Tariff Affairs

Mr. Kenneth R. Mason
Secretary to the Commission
U.S. International Trade Commission
Washington, D.C. 20436

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<u>Company</u>	<u>Old Subsidy</u>	<u>New Subsidy</u>
Sicafe - Productos Siderurgica	24.4	10.6
Siderurgica Sao Paulo Ltda.	18.1	4.3
Siderurgica Bandeirante Ltda.	23.1	7.3
Siderurgica Bondespachense	25.3	11.5
Siderurgica Itatiaias S.A.	27.7	11.9
Siderurgica Alterosa Ltda.	24.3	10.5
Cia Satelagoania de Siderurgica	24.9	9.1
Siderurgica Valinho S.A.	22.0	6.2
Siderurgica Sao Sebastiao de Itatiaiuqu S.A.	30.3	16.5
Usina-Siderurgica Paraense S.A.	21.8	8.0
Siderurgica Camaragos S.A.	19.0	5.2
Cimetal Siderurgica S.A.	24.3	8.5
Metalurgica N.S. da Pehna S.A.	26.2	12.4
Cia Brasileira de Ferro	29.5	15.7
Siderurgica Santa Maria Ltda.	21.3	7.5
Cia Siderurgica Pitanqui	37.5	23.7
<hr/>		
Weighted-Average	24.3	9.15

20 FEB 1980

Mrs. Catherine M. Bedell
Chairman
International Trade Commission
Washington, D.C. 20436

Dear Madam Chairman:

On November 20, 1979, the Treasury Department published in the Federal Register its final determination that benefits were being conferred on pig iron from Brazil which constituted the bestowal of bounties or grants under the countervailing duty law (43 FR 67554).

On December 31, 1979, the U.S. Treasury notified the Commission that as a result of certain actions taken by the Government of Brazil, revisions were necessary in the net bounties or grants found with respect to each of the 16 companies originally investigated as well as the overall weighted-average benefit.

As the result of additional information supplied by the Government of Brazil, the Commerce Department has determined that further revisions to these rates are necessary. The revisions were determined necessary after it was established that the manner in which benefits bestowed under two export-financing programs were calculated based on inaccurate information supplied by the Brazilians. Specifically, a compensating balance requirement has subsequently been found not to be a requirement of the Brazilian Government and should, therefore, not have been included in calculating the effective interest rate charged on the loans as it originally was. The attached sheet lists the new rates applicable to those companies as well as the weighted-average benefit. I hope that this information will be useful in the International Trade Commission's investigation concerning the possible injury or likelihood of injury caused by subsidized Brazilian pig iron imports.

Sincerely,

John D. Greenwald
Deputy Assistant Secretary
(Import Administration) I

CD/ITA/OP/DWEiss/566-8256/jm/2/20/80

CODE	INITIATOR	REVIEWER	REVIEWER	REVIEWER	REVIEWER	
SURNAME	EISS	SELF				
INITIAL/DATE	WJG/2/20/80	WJG/2/20	/	/	/	

<u>Company</u>	<u>Original Subsidy</u>	<u>Final Revision</u>	<u>New Rates</u>
Sicafe - Productos Siderurgica	24.4	10.6	7.04
Siderurgica Sao Paulo Ltda.	18.1	4.3	2.85
Siderurgica Bandeirante Ltda.	23.1	7.3	4.70
Siderurgica Bondespachense	25.3	11.5	7.70
Siderurgica Itatiaias S.A.	27.7	11.9	7.95
Siderurgica Alterosa Ltda.	24.3	10.5	6.92
Cia Satelagoania de Siderurgica	24.9	9.1	6.08
Siderurgica Valinho S.A.	22.0	6.2	4.12
Siderurgica Sao Sebastiao de Itatiaiuqu Itatiaiuqu S.A.	30.3	16.5	11.44
Usina-Siderurgica Paraense S.A.	21.8	8.0	5.62
Siderurgica Camaragos S.A.	19.0	5.2	3.06
Cimetal Siderurgica S.A.	24.3	8.5	5.41
Metalurgica N.S. da Pehna S.A.	26.2	12.4	8.20
Cia Brasileira de Ferro	29.5	15.7	10.40
Siderurgica Santa Maria Ltda.	21.3	7.5	4.98
Cia Siderurgica Pitanqui	37.5	23.7	15.42
<hr/>			
Weighted-Average	24.3	9.15	6.07

APPENDIX D

DATA ON HOT METAL

The most important market for hot pig iron is in the manufacture of ingot molds. Industry estimates of the amount of ingot molds produced suggest that this market is larger than the total market for cold merchant pig iron. Ingot molds are cast-iron shapes that molten steel is poured into to shape it into ingots as it cools. Ingot molds are large items, often being more than 6 feet long in length, breadth, and height. The molds are made by pouring the hot pig iron into molds made of compacted foundry sand and allowing them to cool and solidify. When the mold is cold, the compacted foundry sand is jackhammered out, thus finishing the mold. Since ingot molds do not last long when in use, large quantities of them are required; industry estimates that about 3 million tons of ingot molds are produced each year, and the following data confirm the estimates.

Year	Quantity	Value
	: 1,000 short tons :	: 1,000 dollars :
1977-----	: 1,058 :	: 179,016 :
1978-----	: 1,236 :	: 225,121 :
1979-----	: 1,132 :	: 225,092 :

In addition to the hot metal sold to ingot mold foundries, the following amounts were transferred by hot metal producers to their own ingot mold foundries:

	Quantity (1,000 short tons)
1977-----	2,106
1978-----	2,300
1979-----	2,273

APPENDIX E
PRICE COMPARISON DATA
(CONFIDENTIAL)

Library Cataloging Data

United States. International Trade
Commission.

Pig iron from Brazil : determination of
material injury in investigation no.
701-TA-2(final) under section 705(b) of the
Tariff act of 1930, together with the
information obtained in the investigation /
USITC. -- Washington : USITC, 1980.

22, A 50, [25] p. : ill. ; 28 cm. -- (USITC
publication 1048)

"Prepared principally by Harold A. Taylor,
Jr. and Howard Gooley."

1. Cast-iron. I. Taylor, Harold A. II.
Gooley, Howard. III. Title.

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