IRON ORE PELLETS FROM BRAZIL

Determination of the Commission in Investigation No. 701-TA-235 (Preliminary) Under the Tariff Act of 1930, Together With the Information Obtained in the Investigation

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UNITED STATES INTERNATIONAL TRADE COMMISSION

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Note: Data which would disclose confidential operations of individual concerns may not be published and therefore have been deleted from this report. Deletions are indicated by asterisks.

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, DC

Investigation No. 701-TA-235 (Preliminary)

IRON ORE PELLETS FROM BRAZIL

Determination

On the basis of the record 1/ developed in the subject investigation, the Commission determines, pursuant to section 703(a) of the Tariff Act of 1930 (19 U.S.C. § 1671b(a)), that there is a reasonable indication that an industry in the United States is materially injured, or threatened with material injury, 2/ by reason of imports from Brazil of iron ore pellets, provided for in item 601.24 of the Tariff Schedules of the United States, which are alleged to be subsidized by the Government of Brazil.

Background

On December 20, 1984, a petition was filed with the Commission and the Department of Commerce by counsel for the Cleveland-Cliffs Iron Co., Oglebay Norton Co., Pickands Mather & Co., and the United Steelworkers of America, on behalf of the domestic industry producing iron ore pellets, alleging that an industry in the United States is materially injured or threatened with material injury by reason of subsidized imports of iron ore pellets from Brazil. Accordingly, effective December 20, 1984, the Commission instituted preliminary countervailing duty investigation No. 701-TA-235 (Preliminary).

Notice of the institution of the Commission's investigation and of a public conference to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade

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

2/ Chairwoman Stern and Commissioner Lodwick determine that there is a reasonable indication that an industry in the United States is threatened with material injury only.

Commission, Washington, DC, and by publishing the notice in the Federal Register of December 27, 1984 (49 F.R. 50314). The conference was held in Washington, DC, on January 10, 1985, and all persons who requested the opportunity were permitted to appear in person or by counsel.

VIEWS OF THE COMMISSION

We determine that there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of imports of iron ore pellets from Brazil which are alleged to be subsidized. 1/

Although the performance of the domestic industry has recently shown some improvement, there is a reasonable indication that it is continuing to exhibit signs of material injury or it is threatened with material injury by reason of allegedly subsidized imports from Brazil. The Commission's affirmative decision in this investigation is based primarily on the increase in market penetration of allegedly subsidized imports from Brazil, the substantial margins of underselling, the confirmed lost sales due to price, the potential for further lost sales, and the apparent ability of Brazilian producers to increase exports.

Like product and domestic industry

Like product is defined by statute as:

> [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 subtitle. 2/

The imports which are the subject of this investigation are iron ore in pellet form. The notice of investigation issued by the Department of Commerce (Commerce) defines iron ore pellets as:

1/ Chairwoman Stern and Commissioner Lodwick determine only that there is a reasonable indication that the domestic industry is threatened with material injury by such imports.

2/ 19 U.S.C. § 1677(10).

> [F]ine particles of iron oxide, hardened by heating and formed into balls of 3/8" to 5/8" for use in blast furnaces to obtain pig iron, as currently provided for in items 601.2430 and 601.2450 of the Tariff Schedules of the United States, Annotated (TSUS). 3/

Pelletizing is a process by which variously sized ore-bearing minerals are systematically reduced to concentrates. The reduction process requires grinding and separation. 4/ Concentrates are fed into rotating ball drums in which pellets are formed. Both Brazilian and U.S. iron ore pellets are similar in characteristics and use. 5/ They contain roughly the same iron content and are put to the same use, the production of pig iron. Therefore, we conclude that the like product for purposes of this preliminary investigation is iron ore pellets.

In the United States, virtually all iron ore that is mined for use in blast furnaces is agglomerated by pelletizing. 6/ The pellets are produced to

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3/ 50 Fed. Reg. 2322 (January 9, 1985). Item No. 601.2430 covers iron ore that is "not concentrated or sintered." In other words, iron ore pellets do not come within that item number. Item No. 601.2450 covers "other" forms of iron ore, which encompasses more than iron ore pellets. Imports within that category may be sinter fines as well as pellets and other concentrated ore. Although there is an apparent ambiguity in the Commerce notice, we will presume that their investigation is limited to pellets--and only pellets which are manufactured, as opposed to "natural pellets." If we receive a more precise definition of the scope of this investigation from Commerce, we will conduct any final investigation accordingly.

4/ Magnetite ore is passed over magnetic cobbers which attract the iron ore while waste is washed away. Magnetic finishers, flotation and thickening are also used to create the concentrate for pellets. Hematite ore is processed basically by chemical means. Report of the Commission (Report) at A-3.

5/ Because of lower iron content in U.S. ore, the U.S. production process tends to be more complex, requiring more grinding and separation than the Brazilian process.

6/ Iron ore comes in other forms, such as sinter, but currently these account for only three percent of production in the United States. Id. at A-2. Sintering consists of heating particles of iron ore of less than 1/4 inch in diameter to fuse the sinter feed into a coarse form. Sintered ore is more fragile than pelletized ore and can disintegrate during transport. Therefore sintering occurs not at the mine but at the steel mill. The sintering process is not used to any significant degree in the United States.

fairly uniform specifications with an iron content of 63 to 65 percent, by weight. 7/ The iron ore from which the pellets are made is mined largely in Minnesota and Michigan. In 1983, approximately 97 percent of the raw ore mined in the United States was pelletized. 8/

In a countervailing duty investigation the domestic industry is defined in terms of the like product as the:

> [D]omestic 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. 9/

The domestic industry consists of the U.S. producers of iron ore pellets. The domestic iron ore pellet market is composed of both captive and merchant producers. 10/ One issue that has arisen in this case is whether the Commission should define the domestic industry to include only the merchant sector. Due to the magnitude of the captive sector of the market, we do not

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7/ Id. at A-2.
8/ Id.
9/ 19 U.S.C. § 1677(4)(A).
10/ Petitioners are three merchant pellet producers and the United Steelworkers of America. Merchant pellet producers, of which there are five in the United States, generally own or operate iron ore mines or pelletizing facilities in partnerships or joint ventures with steel producers. Report at A-4. The output of the pelletizing plant is allocated to the partners according to each partner's percentage of equity ownership or under the terms of a joint venture agreement. Steel producers primarily use their share of pellets for "captive" consumption, though a portion may be sold to or exchanged with other companies that produce steel. Merchant pellet producers sell their share of a plant's output to steel companies either under long-term contracts or on the spot market.

Not every pelletizing plant in the United States is operated by or with a merchant pellet producer. Pelletizing plants are also operated by U.S. Steel Co. and Inland Steel Company and by Reserve Mining Co. Reserve Mining Co. acts as a manager/operator of one pelletizing plant, but is neither a merchant pellet producer nor a steel company. Id. at A-5.

In 1983, nearly 90 percent of total shipments were made to steel companies that were equity owners of the plants where the pellets were produced. The remaining 10 percent was sold commercially. A slight percentage of steel producers' pellets was sold commercially. Id. at A-15.

find it appropriate to exclude this sector from the definition of the domestic industry. 11/ 12/

11/ Vice Chairman Liebeler notes that the petitioners have argued that those operators who produce for captive consumption should be excluded from the definition of the domestic industry. The petitioners have provided no basis for such a distinction, Post-Conference Brief of Petitioners at 9, and the statute provides no such authority. When Congress gave the Commission authority to exclude certain domestic producers from the domestic industry in a Title VII investigation, it did so explicitly, as indicated by the related parties provision. Section 771(4)(B) of the Tariff Act of 1930, 19 U.S.C. § 1677(4)(B) (1980). The absence of similar discretionary authority with respect to integrated producers suggests that the Commission has no power to exclude those producing for captive consumption. The Commission must consider the condition of all of the producers of the like product.

Moreover, Commission precedent weighs heavily against creating distinctions among domestic producers on the basis of who their customers are. In Melamine from Brazil, Inv. No. 731-TA-107 (Preliminary), USITC Pub. 1303 (1982), the Commission stated, "The identification of the domestic product which is like the imported article in terms of characteristics and uses is not affected by distinguishing between captive and non-captive sales." See also Titanium Sponge from Japan and the United Kingdom, Invs. Nos. 731-TA-161-162 (Final), USITC Pub. 1600 (November 1984). The Commission has at least once separated captive and open market sales. In Melamine in Crystal Form from Austria and Italy, Inv. 731-TA-13 (Final), USITC Pub. 1064 (1980), a negative final, the Commission reached no legal conclusion on this issue but disaggregated the data where possible to provide the petitioners with their best chance of succeeding. Although the Commission should properly be more skeptical of pricing data received concerning captive sales, the financial condition of a domestic industry cannot be meaningfully evaluated without taking into account such sales. I am therefore persuaded that a distinction between merchant and captive sales has no meaningful legal or economic significance for purposes of determining the domestic industry and wish to lay this issue to its well-deserved rest. R.I.P.

12/ Commissioner Eckes and Commissioner Rohr do not reach a conclusion on the issue of separation of the captive and merchant markets in this preliminary investigation. They recognize that the long term interests of merchant pellet producers are not identical with the interests of steel companies which own or operate mines and pelletizing facilities. The steel companies must operate in a highly competitive international market, in which they must seek every opportunity to lower the production costs of their finished product. If imported pellets are available at a price significantly lower than the price at which steel companies are able to produce pellets in the United States, they will inevitably consider sourcing at least some of the pellets from abroad. The merchant pellet producers do not face this consideration.

Condition of the domestic industry

In assessing the condition of the domestic industry, under section 733 of the Tariff Act of 1930, 13/ the Commission considers, among other factors, whether there are declines in production, capacity utilization, sales, market share, employment, wages, and profitability. 14/

U.S. production of iron ore pellets declined by 53 percent between 1981 and 1982 and rose in 1983 and 1984. 15/ U.S. production in 1981 was over 66 million long tons. That figure dropped to 31 million long tons in 1982 before rising slightly in 1983 to over 35 million long tons. Partial year data for 1984 indicates continued improvement with production from January-September 1984 nearly 41 million long tons, compared with almost 27 million long tons for the same period in 1983. 16/ Even with this recent improvement, however, production remains substantially below the 1981 level.

During the period of this investigation, capacity utilization followed the same pattern, dropping from 81.3 percent in 1981 to 38.1 percent in 1982. 17/ Capacity utilization then increased to 43.7 percent in 1993 and reached 68.6 percent for January-September 1984, still far short of 1981 levels. 18/ Furthermore, 14 of the 16 major domestic pelletizing plants in the United States experienced either temporary or permanent shutdowns in 1983 or 1984. 19/ Shipments by U.S. producers followed the same trends as production and capacity utilization. 20/

13/ 19 U.S.C. § 1673(b).
14/ 19 U.S.C. § 1677(7)(C)(iii).
15/ Report at A-15.
16/ Id.
17/ Id.
18/ Id.
19/ Id. at A-7, Table 1.
20/ Id. at A-15.

The number of production and related workers engaged in the production of iron ore pellets in 1981 was 14,337. In 1982, there were only 7,617 such workers and only 6,305 in 1983. For January-September 1984, there were 7,369 workers, an increase over the 6,043 employed in the comparable period of 1983. Despite the increase in partial year 1984, the number of persons employed in the production of iron ore pellets is drastically below the level of 1981. 21/ 22/

The domestic industry experienced losses during 1982-83 on noncaptive commercial sales. 23/ 24/ In 1981, operating income as a percent of net sales

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21/ Id. at A-18.

22/ Chairwoman Stern notes that the decline in demand has been particularly severe for the employees of this industry because pelletizing plants are located in Northern Minnesota and Michigan—areas heavily dependent upon the iron ore pellet industry as a source of employment. See testimony of the Honorable James B. Oberstar (Rep. Minn.) and the Honorable Robert W. Davis (Rep. Mich.) Transcript of the Hearing at 6-20.

23/ We find financial results covering captive sales to be less meaningful because net sales are based on transfer prices which do not necessarily reflect market prices.

24/ Chairwoman Stern notes that assessing the financial condition of this industry is complicated by the differences between the "captive" and "merchant" producers and the fact that the overwhelming amount of domestic production is captively consumed. The "captive" and "merchant" producers with equity interests in a particular mine presumably share the increased costs of production associated with current declining capacity utilization levels in an industry characterized by high fixed costs. However, the "captive" producers sell their output to their own steelmaking divisions at transfer prices which are higher than market conditions would dictate. Thus, with the exception of 1982, the operating profit margins that are based upon data including captive consumption have been high during the entire period. See Report, Table 5. For the "merchant" producers, profitability followed the same trend, but was lower. See Table 6. In addition, most merchant sales are made pursuant to long-term contracts at prices pegged to the "Lower Lakes price," which is also currently higher than market conditions would otherwise dictate. On the other hand, it is not clear at this preliminary stage to what extent current prices are in line with costs of production, and the relationship between costs and production volumes. Due to the magnitude of the captive sector, in any final investigation she will expect a financial analysis of captive producers to include analyses of their costs of production and of the tax consequences of their use of transfer pricing. For the merchant producers, she will expect data on cost of production and an analysis of the long-term contracts currently in effect, including their specific price provisions, termination dates, and the status of any related renegotiation or litigation efforts.

was 15.8 percent, with operating income of $60.5 million. 25/ However, operating losses were substantial in both 1982 and 1983 totalling $14.1 million and $4.6 million respectively. 26/ These losses represent 7.4 and 2.3 percent of net sales for those years. 27/ For the first nine months of 1984 operating income improved to $38.5 million, or 14.3 percent of net sales. 28/

Reasonable indication of material injury or threat of material injury by reason of the allegedly subsidized imports 29/

In making its determination whether there is a reasonable indication that

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25/ Id. at A-21, Table 6.
26/ Id.
27/ Id.
28/ Id.
29/ Chairwoman Stern and Vice Chairman Liebeler note that the problems experienced by the domestic industry are directly related to the declines in demand for finished steel products experienced by steel producers during recent years. Thus, our task is to determine whether imports from Brazil have contributed or will contribute in any material way to such problems. In this preliminary investigation, we have not accepted petitioners' key argument that the domestic "Lower Lakes" price is the appropriate benchmark against which to evaluate the issue of underselling. On the other hand, petitioners also argue that the alleged subsidies have enhanced the pricing flexibility of Brazil, and thus exerted downward pressure on the world price. Assuming that domestic producers will continue to be forced to lower at least their spot market sales prices to come into alignment with the world price, it is plausible that Brazilian subsidies may exacerbate their pricing problems. Thus, we find a reasonable indication of threat of material injury at this preliminary stage.

However, this case presents several issues relating to the key issue of causality which shall require full clarification in any final investigation, specifically: (1) the role of imports from Canada as well as other countries in both setting the "world price" and in exerting downward pressure on the "Lower Lakes" price; (2) the pricing and marketing of pellets imported from Canada by domestic producers and whether the import prices are transfer prices; (3) whether and to what extent inland domestic transportation costs are a factor in the failure of domestic producers to supply some domestic purchasers; (4) the comparative production cost advantages of Brazilian pellets compared to domestic pellets; (4) whether the "Carajas" project constitutes a threat of increased pellet production; and (5) what are the short and long term plans of domestic steel producers regarding the importation of pellets from Brazil in light of pressures to reduce costs to

(Footnote continued)

material injury 30/ or threat thereof to the domestic industry is "by reason of" allegedly subsidized imports, 31/ the Commission must consider, among other factors, the volume of imports, the effect of imports on prices in the United States for the like product, and the impact of such imports on the relevant domestic industry. 32/ In determining whether a threat of material injury exists, the Commission must examine the rate of increase of allegedly subsidized goods into the U.S. market, the capacity in the exporting country to generate exports, and the likelihood that additional exports will be directed to the U.S. market. 33/

Imports from Brazil have increased during the period of the investigation in both absolute and relative terms. 34/ For example, imports from Brazil increased substantially between 1982 and 1983, both in absolute terms and as a percentage of domestic consumption. 35/ For the period January-September 1984, imports further increased both in absolute terms and as a percentage of domestic consumption, reaching a level more than four times higher than the levels reached during the period January-September 1983. 36/ Moreover, the

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(Footnote continued)
remain competitive with foreign steel producers, particularly for those with substantial investments in domestic pellet production?

The testimony of Mr. Marcus, an industry expert, was particularly helpful in acquiring an understanding of the dynamics of the iron ore pellet market. However, it is problematic to place great weight on the testimony of any one expert appearing for a particular party. Given the complexity of some of these issues, in any final investigation we may suggest that the Commission itself request the testimony of industry experts on these and other issues.

30/ The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant." 19 U.S.C. § 1677(7).

31/ 19 U.S.C. § 1671(a).

32/ 19 U.S.C. § 1677(7).

33/ S. Rep. No. 249, 96th Cong., 1st Sess. 88-89 (1979).

34/ Report at A-27, Table 9. Actual data on imports cannot be disclosed because they contain confidential information.

35/ Id.

36/ Id.

level of market penetration of Brazilian imports is even higher when considering only the commercial market. 37/ 38/ 39/

The data obtained in this investigation give a clear indication that the price of imported iron ore pellets from Brazil is substantially below that of domestically produced iron ore pellets. 40/ Information obtained from domestic producers and domestic consumers of Brazilian imports indicate that the delivered price of Brazilian pellets is significantly below the delivered price of domestic pellets.

The Commission investigated allegations of lost sales and lost revenues made by domestic producers and confirmed that there were several instances of U.S. producers having lost sales to Brazilian imports primarily because of price. 41/ One domestic consumer noted that they use Brazilian pellets as a price lever on domestic producers. 42/ 43/ Thus, there is evidence that lower priced imports have caused lost sales and lost revenues because of downward pressure on domestic prices.

37/ Id. at A-28, Table 10.

38/ Chairwoman Stern notes that since commercial sales account for approximately 10 percent of total shipments, she does not wish to over-emphasize import market share based upon commercial sales only. Also, she does not believe that a clearly increasing trend of Brazilian import penetration has been shown because the increase in 1984 apparently reflects volumes which were supposed to be shipped pursuant to long-standing long-term contracts, but were voluntarily deferred during 1982 and 1983 at the request of U.S. steel company purchasers facing an oversupply situation. See Respondents' post-hearing brief at 19.

39/ Vice Chairman Liebeler finds this consideration to be irrelevant.

40/ Report at A-29-31.

41/ Id. at A-31.

42/ Id.

43/ Chairwoman Stern notes that in this case we are asked to accept a largely artificially-determined transfer price that is higher than current market conditions would otherwise dictate as the appropriate benchmark. As she has noted elsewhere, competition per se is not material injury. See her Separate Views in Nitrocellulose from France, Inv. No. 701-TA-190, USITC Pub. 1390 at 25 (1983).

In addition to the factors previously discussed, the threat of material injury posed by imports from Brazil is further supported by the fact that domestic shipments and prices attained the levels seen in 1984 partially due to long term contracts, some of which will be expiring in the near term. Current market factors may have an effect on the terms of new contracts. It should also be noted that Brazilian producers have the ability to increase the level of exports to the United States. Although Brazilian capacity has remained stable since 1978 at 23,000 thousand tons, home market sales have decreased considerably since 1981. 44/ 45/

44/ Report at A-14, Table 3.

45/ Chairwoman Stern notes that petitioners argue that imports of pellets from Brazil can and will increase because: (1) currently there is excess pellet-making capacity; and (2) the new "Carajas" Amazon development project will soon result in additional iron ore capacity that could be used to make processed pellets; and (3) even if Carajas is used to produce ore in sinter and "natural" pellet form, this production will indirectly increase the supply or depress the price of pellets.

Respondents argue that Brazilian pellet production is near full capacity utilization, and that the U.S. market constitutes only a very small share of Brazil's exports. Further, they argue that it is improper for the Commission to consider Brazil's capacity to produce other kinds of ore associated with the Carajas project because (1) as a matter of law, these are products different from the imports subject to investigation; (2) as a practical matter, users of pellets cannot use sinter interchangeably; (3) little, if any of the Carajas capacity is intended for pellet production because economics and business judgment dictate against the costly processing of the high grade Brazilian ore into pellets when greater profits are obtainable by selling the sinter ore unprocessed and by selling the natural pellets to purchasers with direct reduction furnaces. Petitioners have countered some of these arguments. However, the arguments of both sides are largely contradictory and unsupported cross-allegations.

Information on the record indicates that Brazilian pellet producers are currently operating at near full capacity utilization rates due to a recent surge in exports of pellets to markets other than the United States. In any final investigation the Commission will more throughly analyze these secondary arguments.

INFORMATION OBTAINED IN THE INVESTIGATION

Introduction

On December 20, 1984, a countervailing duty petition was filed with the U.S. International Trade Commission and the U.S. Department of Commerce by counsel for the Cleveland-Cliffs Iron Co., Oglebay Norton Co., Pickands Mather & Co., and the United Steelworkers of America on behalf of the domestic industry producing iron ore pellets. The petition alleges that the domestic iron ore pellet industry is materially injured and is threatened with material injury by reason of imports from Brazil of iron ore pellets, provided for in item 601.24 of the Tariff Schedules of the United States (TSUS), which are allegedly subsidized by the Government of Brazil. The petitioners also allege the existence of "critical circumstances," as defined in section 703(e)(i) of the Tariff Act of 1930, with respect to imports of iron ore pellets from Brazil. Accordingly, the Commission instituted a preliminary countervailing duty investigation under section 703(a) of the act to determine whether there is a reasonable indication that an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports of the allegedly subsidized iron ore pellets from Brazil.

Notice of the institution of the Commission's investigation and of a public conference to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the Federal Register of December 27, 1984 (49 F.R. 50314). 1/ On January 10, 1985, the Commission held a public conference in Washington, DC, in connection with the investigation. 2/

On January 16, 1985, Commerce instituted a countervailing duty investigation to determine whether the manufacturers, producers, or exporters in Brazil of iron ore pellets receive benefits that constitute subsidies within the meaning of the countervailing duty law. 3/

The Commission voted on this investigation on January 28, 1985. The statute directs that the Commission make its determination within 45 days after receipt of the petition, or, in this case, by February 4, 1985.

Previous Commission Investigations

The Commission has not previously conducted an investigation specifically on iron ore pellets. However, the Commission conducted investigations on iron ore in 1958, 1960, and 1963 that included iron ore pellets.

On August 4, 1958, pursuant to a resolution of the Committee on Finance, United States Senate, the Commission instituted an investigation under section 332 of the Tariff Act of 1930 (332-35) to examine the conditions of

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1/ A copy of the Commission's notice of institution of a preliminary investigation is presented in app. A.

2/ A copy of the list of witnesses appearing at the conference is presented in app. B.

3/ A copy of Commerce's notice of institution is presented in app. C.

competition in the United States between iron ore produced in the United States and in foreign countries. A report on this investigation was transmitted to the Committee on Finance in March 1959. 1/

On July 6, 1960, pursuant to a resolution of the Committee on Finance, United States Senate, the Commission instituted escape-clause investigation No. 7-92 under section 7 of the Trade Agreements Extension Act of 1951 to determine whether iron ore, including manganiferous iron ore, was, as a result in whole or in part of the customs treatment reflecting concessions granted thereon under trade agreements, being imported into the United States in such increased quantities, either actual or relative, as to cause or threaten serious injury to the domestic industry producing like or directly competitive products. In December 1960, the Commission made a negative determination in that investigation. 2/

In June 1963, the Commission made a negative determination in a trade adjustment assistance investigation concerning U.S. Steel Corp. iron ore mines located near Fairfield, AL. 3/

The Product

Description and uses

Iron ore pellets are fine particles of iron oxide that are hardened by heating and formed into balls of 3/8 to 5/8 inch. The pellets are manufactured in the United States from lower grade magnetite and hematite taconite ores, mined largely in Minnesota and Michigan. The pellets are produced to fairly uniform specifications, with an iron content of 63 to 65 percent, by weight. Virtually all pellets are used as feedstock for the production of pig iron in blast furnaces.

In addition to pelletization, iron ore is frequently sintered for use in ironmaking. Sintering, which is typically used to agglomerate higher grade ores, consists of heating and fusing particles of iron ore of less than 1/4 inch in diameter. Sintered ore is more fragile than pelletized ore and can disintegrate during transport; therefore, sintering occurs not at the mine but in sintering plants located at steel plants. Most Japanese and European steel companies utilize sintered ore, which contrasts to U.S. practice, where pellets are the more common material used. In 1983, approximately 97 percent of the iron ore mined in the United State was pelletized.

The pelletizing of iron ore consists of the systematic reduction of various sizes of ore-bearing minerals to concentrates and then pellets; in the case of magnetite and hematite ores, it includes grinding, separation, and then

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1/ U.S. Tariff Commission, Report of Investigation No. 35 Under Section 332, Tariff Act of 1930 . . ., March 1959.

2/ U.S. Tariff Commission, Report on Escape-Clause Investigation No. 7-92 Under Section 7 of the Trade Agreements Extension Act of 1951, as amended, December 1960.

3/ U.S. Tariff Commission, Tariff Commission Reports to the President on Iron-Ore Mine Workers' Petition for Adjustment Assistance, TC Publication 96, June 28, 1963.

pelletizing. A state-of-the-art process 1/ for pelletizing iron ore begins with the transporting of the crude ore to primary grinding mills. The tumbling action of revolving mills serves to reduce the ore to the consistency of a coarse beach sand. The ore is ground further in the pebble mills until it reaches a powder-fine consistency.

In the case of magnetite ore, the finely ground material passes over magnetic cobbers that attract the iron while the waste is washed away. The material is further upgraded in setting tanks, magnetic finishers, and by flotation. Following a thickening operation, 90 percent of the moisture is removed in disc filters. In the case of hematite ore, processing is basically by chemical means. Finely ground ore is conditioned by adding sodium silicate and caustic soda and a cooked corn starch. This treated pulp is fed to desliming tanks. The iron-rich fraction is drawn out and fed to flotation machines. Water is then removed from the concentrate by steam vacuum filters.

The pelletizing of magnetite and hematite concentrates is essentially the same. The concentrates are fed into rotating balling drums, and as the material rolls, marble-sized pellets are formed. 2/ The soft pellets are then carried by conveyor to a traveling grate, where they are dried and preheated before being deposited into a rotary kiln, which hardens the pellets at 2,400 degrees Fahrenheit using coal, natural gas, or fuel oil as a source of heat.

U.S. tariff treatment

Imports of iron ore pellets are classified under item 601.24 of the TSUS. This item provides for iron ore, including manganiferous iron ore containing not over 10 percent by weight of manganese, and the dross or residuum from burnt pyrites. Under this item there are two Tariff Schedules of the United States Annotated (TSUSA) items: 601.2430 ("Not Concentrated or Sintered") and 601.2450 ("Other"). Iron ore pellets are classified under TSUSA item 601.2450 along with other concentrates of iron ore. Imports of iron ore and iron ore pellets are free of duty regardless of origin.

Nature and Extent of Alleged Subsidies

The petitioners allege that iron ore pellet producers in Brazil benefit from an extensive program of countervailable subsidies intended by the Brazilian Government to promote economic development and export expansion. The petitioners claim that the Brazilian Government has actively promoted the growth of iron ore exports through its majority ownership of Companhia Vale do Rio Doce (CVRD), the world's largest producer of iron ore, through CVRD's participation in the Grande Carajas regional development project and through the subsidies it has provided to CVRD and other Brazilian iron ore producers. Among the major types of alleged subsidies are (1) tax exemptions and incentives, (2) export financing subsidies, (3) mineral and mining industry subsidies, (4) government capital subsidies and external financing assistance,

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1/ Most of the Lake Superior plants use the same process with some variations.

2/ Although several devices are available for forming pellets, the balling drum and the so-called disc pelletizer are the most widely used.

and (5) regional development incentives such as those for the Grande Carajas program. The petitioners have not indicated the exact value of alleged countervailable subsidies, but allege that subsidized imports enable the Brazilians to undersell domestic producers by 30 percent or more.

The Domestic Market

Apparent U.S. consumption

Data on the estimated total apparent U.S. consumption of iron ore pellets, as compiled from responses to questionnaires of the U.S. International Trade Commission, official statistics of the U.S. Department of Commerce, and official statistics of the Bureau of Mines, U.S. Department of the Interior, are shown in the following tabulation (in thousands of long tons):

Period	Apparent U.S. consumption
1978	78,471
1979	84,365
1980	67,156
1981	***
1982	***
1983	43,699
Jan.-Sept.--	
1983	***
1984	40,069

U.S. producers

Iron ore pellets are produced in the United States at pelletizing facilities located at the site of, or near, iron ore mines. The mines/pelletizing facilities (pelletizing plants) are generally owned by partnerships of steel producers and merchant pellet companies. The output of the pelletizing plants is allocated to the partners according to each partner's percentage of equity ownership in each pelletizing plant. The steel producers generally use their share of the output for captive consumption in steelmaking, 1/ and the merchant pellet companies sell their share of the output on the open market either under long-term contracts or on a spot basis. 2/

There are five merchant pellet companies in the United States: (1) The Cleveland-Cliffs Iron Co. (Cleveland, OH); (2) Oglebay Norton Co. (Cleveland, OH); (3) Pickands Mather Co. (Cleveland, OH); (4) The Hanna Mining Co. (Cleveland, OH); and (5) the Pea Ridge Iron Ore Co. (Clayton, MO). Three of these merchant pellet companies (Cleveland-Cliffs, Oglebay Norton, and Pickands Mather) are petitioners in this investigation. Hanna Mining and Pea Ridge Iron Ore ***.

1/ Sometimes a portion of this output is either sold to or exchanged with other companies that produce steel.

2/ Merchant pellet companies do not produce steel.

Pelletizing plants in the United States are operated by either (a) one of the five merchant producers, or (b) one of two steel producers (U.S. Steel Corp. and Inland Steel Co.) that own and operate their own pelletizing plants, or (c) Reserve Mining Co., which acts as manager/operator of one pelletizing plant but is neither a steel producer nor a merchant pellet company. Accordingly, the total output of iron ore pellets in the United States is "produced" at pelletizing plants operated by one of these eight companies. The percentage distribution of total U.S. production of iron ore pellets in 1983 by each of these eight operators is shown in the following tabulation:

Firm and location	Percentage distribution
The Cleveland-Cliffs Iron Co. (Cleveland, OH)	***
The Hanna Mining Co. (Cleveland, OH)	***
Inland Steel Co. (Chicago, IL)	***
Oglebay Norton Co. (Cleveland, OH)	***
Pea Ridge Iron Ore Co. (Clayton, MO)	***
Pickands Mather Co. (Cleveland, OH)	***
Reserve Mining Co. (Silver Bay, MN)	***
U.S. Steel Corp. (Pittsburgh, PA)	***
Total	100.0

Cleveland-Cliffs owns 39 percent and is sole operator of the Tilden Mining Co., Ishpeming, MI, and owns 5.1 percent and is sole operator of the Empire Iron Mining Partnership, Ishpeming, MI. As of 1983, Cleveland-Cliffs has been the sole owner and technically the operator of the Marquette Iron Mining Partnership, Ishpeming, MI (the Marquette plant has been shut down since 1981). Cleveland-Cliffs is also a multinational corporation, with ***-percent ownership in the Cliffs Robe River Iron Associates, Australia, and ***-percent ownership in the Sherman Mine, Ontario, Canada, which produces iron ore pellets. Cleveland-Cliffs is also the operator of the Adams Mine in Ontario, Canada, which produces iron ore pellets.

The Hanna Mining Co. owns 37.5 percent and is sole operator of the Butler Taconite Project, Nashwauk, MN, and owns 100 percent and is sole operator of the Groveland Mine, Iron Mountain, MI. Hanna is also the sole operator

(and a former owner of 15 percent) of the National Steel Pellet Plant, Keewatin, MN. Hanna ceased production at the Groveland Mine in mid-January 1981 and permanently closed the facility in December 1982. Approximately *** percent of the capacity of the National Steel Pellet Plant was also permanently closed in 1982. Hanna also owns 26.77 percent and is sole operator of the Iron Ore Co. of Canada (IOC). Hanna ***. The one remaining IOC pellet plant is located in Labrador City, Newfoundland, Canada; the second IOC plant, located in Seven Islands, Quebec, Canada, has been shut down since 1981.

The Inland Steel Co. is the sole owner and operator of the Inland Steel Mining Co. (Minorca Mine), Virginia, MN, and the Jackson County Iron Co., Black River Falls, WI. The Black River Falls pellet facility ceased operations in April 1982, and production has been *** according to Inland's response to the Commission questionnaire.

Oglebay Norton owns 15 percent and is the sole operator of the Eveleth Taconite Co., Eveleth, MN, and owns 20.5 percent and is sole operator of the Eveleth Expansion Co., Eveleth, MN.

The Pea Ridge Iron Ore Co. is the owner (with its parent company, St. Joe Minerals Corp.) and operator of an underground mine and a pelletizing plant in Sullivan, MO.

Pickands Mather, a wholly owned subsidiary of Moore-McCormack Resources, Stamford, CT, is the sole operator of the Erie Mining Co., Hoyt Lakes, MN, and of the Griffith Mine in Ontario, Canada. Pickands Mather also owns 15 percent and is sole operator of the Hibbing Taconite Co., Hibbing, MN, and owns 5.2 percent and is sole operator of the Wabush Mines in Quebec and Newfoundland, Canada. Pickands Mather owns *** percent of Savage River Mines in Tasmania, Australia, and through a wholly owned subsidiary is the sole operator of Savage River Mines. The Erie Mining Co., the Griffith Mine, the Hibbing Taconite Co., and the Wabush Mines all experienced shutdowns of varying lengths during 1981-83 "***." 1/

The Reserve Mining Co. is the operator of the Reserve Mine, Silver Bay, MN, which is owned jointly (50-50) by Armco and LTV.

U.S. Steel Corp. is the sole owner and operator of the Minntac plant, Mountain Iron, MN, which is the largest domestic pelletizing plant in terms of capacity and production. The Minntac plant was temporarily shut down twice in 1983 and has been shut down since November 1984. U.S. Steel was also the sole owner and operator of the Atlantic City Operation, Lander, WY, which was permanently shut down in December 1983. U.S. Steel also owns Quebec Cartier Mining Co., which in turn owns *** percent of Sidbec-Normines, a Canadian company that produces pellets. Sidbec-Normines shut down its mining operations in December 1984 and has since leased its pelletizing plant to Quebec Cartier. This pelletizing plant has a capacity of *** million tons.

1/ From Pickands Mather's response to the Commission's questionnaire.

Table 1 shows major domestic pelletizing plants and plant locations, capacity, shutdowns, operators, and owners.

Table 1.--Domestic iron ore pelletizing plants: Location, capacity in 1983, shutdowns in 1983 and 1984, operators, and owners and their shares of ownership

Plant and location	1983 capacity	Shutdowns		Operator	Owner and share of ownership 1/
		1983	1984		
	Million long tons				
Atlantic City Operation, Lander, WY.	1.6	Permanently shut down, Dec. 1983.	Permanently shut down, Dec. 1983.	U.S. Steel.	U.S. Steel (100).
Butler Taconite Project, Nashwauk, MN.	2.7	Temporary shutdowns, Jan. 1-Apr. 9; Oct. 30-Dec. 31.	Temporary shutdown, Nov. 10-Dec. 31. 2/	Hanna	Hanna (37.5). Inland (38). Wheeling Pittsburgh (24.5).
Empire Iron Mining Partnership, Ishpeming, MI.	8.0	3/	No shutdown	Cleveland Cliffs.	Cleveland Cliffs (5.1). Inland (40). LTV (35) 4/ McLouth (9.95). Wheeling Pittsburgh (9.95).
Erie Mining Co., Hoyt Lakes, MN.	8.0	Temporary shutdowns, Jan. 1-Apr. 2; Oct. 2-Dec. 31.	Temporary shutdowns, Jan. 1-14; Dec. 2-31. 2/	Pickands Mather.	Bethlehem (45). Interlake (10). LTV (35). Stelco (10).

See footnotes at end of table.

Table 1.--Domestic iron ore pelletizing plants: Location, capacity in 1983, shutdowns in 1983 and 1984, operators, and owners and their shares of ownership--Continued

Plant and location	1983 capacity	Shutdowns		Operator	Owner and share of ownership 1/
		1983	1984		
	Million long tons				
Eveleth Expansion Co., Eveleth, MN.	3.6	3/	No shutdown	Oglebay Norton.	Oglebay Norton (20.5). Ontario Eveleth 5/ (23.5). Virginia Horn Taconite Co. 6/ (56).
Eveleth Taconite Co., Eveleth, MN.	2.3	Temporary shutdown, Aug. 1-Oct. 11.	No shutdown	Oglebay Norton.	Oglebay Norton (15). Rouge Steel (85).
Groveland Mine, Iron Mountain, MI.	3/	Permanently shut down, Dec. 1982.	Permanently shut down, Dec. 1982.	Hanna	Hanna (100).
Hibbing Taconite Co., Hibbing, MN.	8.1	Temporary shutdowns, Jan. 30-Apr. 16; Oct. 9-Dec. 31.	Temporary shutdowns, Jan. 1-Feb. 2; Nov. 11-Dec. 31.2/	Pickands Mather.	Bethlehem (62.3). LTV (16). Pickands Mather (15). Stelco (6.7).
Jackson County Iron Co., Black River Falls, WI.	0.9	Permanently shut down, April 1982.	Permanently shut down, April 1982.	Inland Steel.	Inland Steel (100).

See footnotes at end of table.

Table 1.--Domestic iron ore pelletizing plants: Location, capacity in 1983, shutdowns in 1983 and 1984, operators, and owners and their shares of ownership--Continued

Plant and location	1983 capacity	Shutdowns		Operator	Owner and share of ownership 1/
		1983	1984		
	Million long tons				
National Steel Pellet Plant, Keewatin, MN.	4.0	Temporary shutdown, Jan. 1-Mar. 19.	No shutdown	Hanna	National Steel Corp. (100).
Minntac, Mountain Iron, MN.	18.5	Temporary shutdowns, Jan. 1-16; Sept. 12-24.	Temporary shutdown, Nov. 15-Dec. 31. 2/	U.S. Steel.	U.S. Steel (100).
Minorca Mine, Virginia, MN.	2.6	Temporary shutdowns, Aug. 8-Oct. 22; Dec. 26-31.	3/	Inland Steel.	Inland Steel (100).
Pea Ridge Mine, Sullivan, MO.	1.7	Intermittently shut down, Jan.-Mar.	No shutdown	Pea Ridge Iron Ore.	St. Joe Minerals (100).
Republic Mine, Marquette Iron Mining Partnership, Ishpeming, MI.	2.7	Temporarily shut down since 1981.	Temporarily shut down since 1981.	Cleveland Cliffs.	Cleveland Cliffs (100).
Reserve Mine, Silver Bay, MN.	8.4	Temporarily shut down, Apr. 17-Dec. 31.	No shutdown	Reserve Mining.	Armco (50). LTV (50).

See footnotes at end of table.

Table 1.--Domestic iron ore pelletizing plants: Location, capacity in 1983, shutdowns in 1983 and 1984, operators, and owners and their shares of ownership--Continued

Plant and location	1983 capacity	Shutdowns		Operator	Owner and share of ownership 1/
		1983	1984		
	Million long tons				
Tilden Mining Co., Ishpeming, MI.	8.0	3/	Temporary shutdowns in August and November.	Cleveland Cliffs.	Algoma (30). Cleveland Cliffs (39). LTV (12). Sharon (5). Stelco (10). Wheeling Pittsburgh (4).

1/ Percentages of ownership are shown in parentheses.
2/ The temporary shutdown is still in effect as of Jan. 18, 1985.
3/ Not available.
4/ Represented the combined ownership of Jones & Laughlin Steel Corp. and Republic Steel Co. in 1983.
5/ A wholly owned subsidiary of Armco, Inc.
6/ A wholly owned subsidiary of Stelco, Inc., a Canadian company.

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

U.S. importers

The five 1/ known U.S. importers of iron ore pellets from Brazil and each importer's share of the quantity imported during January-September 1984 are shown in the following tabulation:

Importer	Share (percent)
Armco, Inc. (Middletown, OH)	***
Lone Star Steel Co. (Lone Star, TX)	***
Shenango, Inc. (Pittsburgh, PA)	***
U.S. Steel Corp. (Pittsburgh, PA)	***
Weirton Steel Corp.(Weirton, WV)	***
Total	100.0

Armco, Inc., a major steel producer, has ***. Armco is also a partial owner of two domestic pelletizing plants: (1) the Reserve Mining Co. plant, Silver Bay, MN, which is jointly owned (50-50) by Armco and LTV, and (2) the Eveleth Expansion Co. (Eveleth Mines), Eveleth, MN, which is 56 percent owned by Virginia Horn, an Armco subsidiary. Armco previously owned 6.07 percent of the Iron Ore Co. of Canada (IOC) but exchanged its IOC ownership share for an interest in the Eveleth Expansion Co. on December 31, 1983.

Armco has a long-term contract with CVRD, the major Brazilian exporter of iron ore pellets, which was entered into around 1977. The reason for entering into the contract, according to *** of Armco, 2/ is that there was ***. The contract is for *** tons of iron ore pellets over a *** period, averaging *** tons per year. 3/ ***, Armco is importing *** per year; reportedly, ***.

Since the mid-1970's, Armco has also had a long-term contract with Oglebay Norton. ***, 4/ ***.

U.S. Steel, a major steel producer, also has a long-term contract with CVRD. The contract is for the period *** and apparently specifies *** tons per year of iron ore pellets, *** in the period under investigation.

Lone Star Steel Co. is a steel producer that imported *** tons of iron ore pellets from Brazil *** during ***. The transaction was a spot market transaction.

1/ *** is believed to have imported some iron ore pellets from Brazil in either 1983 or 1984, but ***.

2/ Telephone conversation, Jan. 11, 1985.

3/ According to *** CVRD, the leading Brazilian exporter of iron ore pellets, Armco's contract with CVRD is for the period *** and apparently specifies *** per year. The Commission staff is attempting to resolve the discrepancies in statements concerning the contract.

4/ A composite of the published prices of the four large merchant producers and of U.S. Steel Corp.; it is the delivered price of a long ton of iron ore to the Cleveland, OH, area. The Lower Lakes price will be discussed further in the price section of this report.

Shenango, Inc., is a producer of pig iron and ingot molds that sells these products (as well as coke) to steel companies. Shenango began to import iron ore pellets on the spot market from Brazil in ***. Shenango had a long-term contract with Pickands Mather until the end of 1982, ***.

Weirton Steel Corp. began its operations on January 11, 1984. Prior to that date, Weirton was a division of National Steel Corp. Weirton purchased *** long tons of iron ore pellets on the spot market from Brazil in 1984.

Channels of distribution

Approximately 96 percent of the iron ore pellets produced in the United States are produced on the Mesabi range of northeastern Minnesota and the Marquette and Menominee ranges of the upper peninsula of Michigan. The pellets are shipped by ore vessels through the Great Lakes to major unlading ports such as Cleveland or Chicago, which are near the principal consuming areas. 1/ Information provided to the Commission by attorneys for the petitioners indicates that pellets produced in Minnesota and Michigan are consumed by steelmakers in the following areas: Illinois and Indiana (47 percent); Ohio, Pennsylvania, New York, New Jersey, and Rhode Island (30 percent); Minnesota and Michigan (14 percent); California, Colorado, and Utah (4 percent); Alabama, Kentucky, Tennessee, and Texas (3 percent); and Maryland, West Virginia, and Delaware (2 percent).

Iron ore pellets imported from Brazil are shipped directly to U.S. steel producers. The pellets are shipped to east coast or gulf coast ports and are either transported inland or, in the case of ***. Of the Brazilian pellets imported into the United States during January-September 1984, approximately *** percent were purchased under long-term contracts, and *** percent were purchased through spot market sales.

The Brazilian Industry

Six companies are known to produce iron ore pellets in Brazil:

(1) CVRD;
(2) Nibrasco;
(3) Itabrasco;
(4) Hispanobras;
(5) Ferteco Mineracao, S.A.; and
(6) Samarco Mineracao, S.A.

Nibrasco, Itabrasco, and Hispanobras are joint ventures of CVRD. Only CVRD and Samarco are known to have exported iron ore pellets to the United States during the period under investigation, with CVRD accounting for an estimated 80 percent of such exports from Brazil to the United States during January 1981-September 1984.

1/ The American Maritime Officers Service, the Seafarers International Union of North America (AFL-CIO), and the Transportation Institute have all sent letters to the Commission indicating that they are in support of the petition in this investigation.

CVRD is, by far, the world's largest producer and exporter of iron ore. CVRD's shipments of iron ore totaled 59.4 million gross tons in 1983, compared with 26.2 million gross tons for worldwide shipments of Cleveland-Cliffs, the world's second largest producer. Information on CVRD's iron ore pellet operations is shown in table 2.

Table 2.--Iron ore pellets: CVRD's exports and home-market sales, 1978-84

(In thousands of metric tons)

Year	Sales				
	Exports to--			Home market	Total
	United States	All other countries	World total		
1978	2,278	3,047	5,325	1,662	6,987
1979	1,507	3,996	5,503	1,574	7,077
1980	669	2,392	3,061	2,422	5,483
1981	848	1,981	2,829	1,307	4,136
1982	22	1,719	1,741	505	2,246
1983	318	2,796	3,114	623	3,737
1984	1,492	3,684	5,176	1,030	6,206

Source: Postconference brief of CVRD, exhibit 6.

CVRD is developing the "Carajas" mineral project in the northeastern Brazilian State of Para. The relatively rich iron ore deposits at Carajas are equivalent to 10 times the iron ore produced in Minnesota, the principal producing area in the United States, during the past 100 years. The total cost of the Carajas project is expected to reach $5.1 billion by 1987. The production schedule for the Carajas iron ore project has been moved up from 1986, and exports are now slated to begin around March 1985. CVRD already has iron ore export contracts for 359 million metric tons during 1985-99; export earnings from these contracts are expected to reach $*** billion. None of these contracts are for exports to the United States, according to ***. 1/

A representative of CVRD stated at the public conference on this investigation that the Carajas project does not have pelletizing facilities and that there is no intention to invest in such facilities in the foreseeable future. 2/ However, Mr. Samuel K. Scovil, chairman of Cleveland-Cliffs, stated that "pelletizing facilities to serve the U.S. market could readily be installed at Carajas." 3/ He also said that Carajas' output may be marketed in the United States in the form of natural pellets. 4/

Information on Brazil's total iron ore pellet operations is shown in table 3.

1/ Telephone conversation, Jan. 21, 1985.
2/ Transcript of the conference, p. 110.
3/ Ibid.
4/ Ibid.

Table 3.--Iron ore pellets: Brazil's exports, home-market sales, capacity, and sales as a share of capacity, 1978-84

Year	Sales					Capacity	Sales as a share of capacity
	Exports to--			Home market	Total		
	United States	All other countries	World, total				
	1,000 metric tons						Percent
1978	3,310	8,248	11,558	1,821	13,379	23,000	58.2
1979	2,375	14,469	16,844	2,260	19,104	23,000	83.1
1980	1,397	15,887	17,284	2,596	19,880	23,000	86.4
1981	1,211	15,152	16,363	1,627	17,990	23,000	78.2
1982	202	15,128	15,330	714	16,044	23,000	69.8
1983	432	13,352	13,784	773	14,557	23,000	63.3
1984	1,492	20,067	21,559	1,181	22,740	23,000	98.9

Source: Sales data are from table 1 of exhibit 3 of the conference, and from other information submitted by CVRD.

Consideration of Material Injury

The information in this section of the report has been compiled from responses to questionnaires of the U.S. International Trade Commission. The Commission sent producer's questionnaires to the 16 known operators, owners, or partial owners of pelletizing plants. Completed questionnaire responses were received from all of the eight known operators, accounting for nearly all of U.S. production of iron ore pellets. 1/ Completed questionnaire responses were also received from all but two of the remaining known owners or partial owners.

U.S. production, capacity, and capacity utilization

Total U.S. production, capacity, and capacity utilization for iron ore pellets, according to responses to questionnaires of the U.S. International Trade Commission, are shown in the following tabulation: 2/

1/ One of the operators, ***, did not provide information on its ***, which has been permanently closed.

2/ Excludes data for ***.

Period	Production	Capacity	Capacity utilization
	1,000 long tons	1,000 long tons	Percent
1981	66,806	82,145	81.3
1982	31,383	82,373	38.1
1983	35,667	81,608	43.7
Jan.-Sept.--			
1983	27,499	61,856	44.5
1984	40,954	59,681	68.6

Production of iron ore pellets decreased by 53.0 percent in 1982, increased by 13.7 percent in 1983, and increased by 48.9 percent during January-September 1984 compared with production in the corresponding period of 1983. Capacity increased by 0.3 percent in 1982, decreased by 0.9 percent in 1983, and decreased by 3.5 percent in January-September 1984 compared with capacity in the corresponding period of 1983. 1/

U.S. producers' shipments

Information on U.S. producers' shipments presented in this section reflect the total shipments of iron ore pellets from domestic pelletizing plants, as reported to the Commission by operators of pelletizing plants. In 1983 nearly 90 percent of total shipments of iron ore pellets from pelletizing plants were shipped to steel companies that were equity owners; approximately 10 percent were known to be sold commercially by merchant producers. Approximately *** percent of the steel producers' pellets were also sold commercially.

U.S. producers' domestic shipments of iron ore pellets are shown in the following tabulation:

Period	Quantity	Value	Unit value
	1,000 long tons	Million dollars	Per long ton
1981	63,761	2,788	$43.73
1982	32,175	1,502	46.68
1983	39,712	1,837	46.26
Jan.-Sept.--			
1983	26,915	1,246	46.29
1984	36,511	1,776	48.64

1/ Excludes data for ***.

The quantity of U.S. producers' domestic shipments of iron ore pellets decreased by 49.5 percent in 1982, increased by 23.4 percent in 1983, and increased by 35.7 percent during January-September 1984 compared with shipments in the corresponding period in 1983.

The value of U.S. producers' domestic shipments of iron ore pellets decreased by 46.1 percent in 1982, increased by 22.3 percent in 1983, and increased by 42.5 percent during January-September 1984 compared with the value in the corresponding period of 1983. The value of shipments reported by operators of pelletizing plants generally reflects the Lower Lakes price, excluding transportation (f.o.b. shipping point).

U.S. producers' exports

All known exports of domestically produced iron ore pellets are made by equity owners of domestic pelletizing plants. Most of the "exports" probably represent swap arrangements between producers in the United States and Canada, but are nevertheless recorded as exports. Over 99 percent of U.S. exports of iron ore are to Canada. Since adequate data on exports were not received in response to questionnaires of the U.S. International Trade Commission, export data were obtained from official statistics of the U.S. Department of Commerce. Since nearly all the iron ore produced in the United States is pelletized, it can be assumed that all the exports consist of pellets. U.S. producers' exports of iron ore pellets are shown in the following tabulation:

Period	Quantity (1,000 long tons)
1981	5,546
1982	3,178
1983	3,781
Jan.-Sept.--	
1983	2,571
1984	3,991

U.S. producers' inventories

Inventory data on iron ore pellets were collected in response to Commission questionnaires. The inventory data reflect inventories of iron ore pellets physically remaining at the pelletizing plants, as reported by operators of pelletizing plants, excluding ***. Data collected on inventories are presented in the following tabulation:

Period	Inventories (1,000 long tons)	Inventories as a share of shipments 1/ (percent)
As of Dec. 31--		
1980----------	4,054	2/
1981----------	7,043	14.0
1982----------	5,682	21.4
1983----------	2,491	7.2
As of Sept. 30--		
1983----------	6,853	3/ 22.1
1984----------	6,718	3/ 16.3

1/ Based on shipment data excluding shipments of ***.
2/ Not available.
3/ Based on annualized shipment data.

U.S producers' employment, wages, and productivity

Data on employment, wages, compensation, and productivity in U.S. plants producing iron ore pellets are shown in table 4. The number of production and related workers producing iron ore pellets in the United States decreased from 14,337 in 1981 to 7,617 in 1982 and 6,305 in 1983. The number of such workers was 7,369 in January-September 1984, representing an increase of 21.9 percent over the number in the corresponding period of 1983. 1/

The number of hours worked by production and related workers producing iron ore pellets decreased by 51.6 percent in 1982, decreased by 11.2 percent in 1983, and increased by 41.2 percent in January-September 1984 compared with hours worked in the corresponding period of 1983.

Total wages paid to production and related workers producing iron ore pellets decreased by 48.3 percent in 1982 and by 15.7 percent in 1983. Total wages paid increased by 43.6 percent during January-September 1984 compared with those paid in the corresponding period in 1983.

The union that represents production and related workers at pelletizing plants is the United Steelworkers of America (USWA). 2/ In March 1983, the USWA entered into a 41-month labor agreement with steel producers and with the pellet producers. The identical wage and benefit cuts accepted for workers in steel plants were accepted for workers in pelletizing plants. Accordingly, as can be seen in table 4, average hourly labor costs in 1983 and 1984 decreased from the 1982 level.

1/ Data for ***, which accounted for *** percent of shipments of iron ore pellets from pelletizing plants in 1983, were not provided for January-September of 1983 and 1984.
2/ Production and related workers at the Pea Ridge Iron Ore Co. are not unionized.

Table 4.--Average number of employees, total and production and related workers in U.S. establishments producing iron ore pellets, and hours worked by, total hourly wages of, average hourly wages of, total compensation of, and output per hour of production and related workers producing iron ore pellets, 1981-83, January-September 1983, and January-September 1984

Item	1981	1982	1983	Jan.-Sept.--	
				1983	1984
Average number of employees:					
All persons	18,056	10,373	8,724	8,342	9,604
Production and related workers producing:					
All products	14,432	7,713	6,400	6,138	7,458
Iron ore pellets	14,337	7,617	6,305	6,043	7,369
Hours worked by production and related workers producing iron ore pellets 1,000 hours	27,143	13,129	11,652	8,399	11,856
Wages paid to production and related workers producing iron ore pellets 1,000 dollars	372,356	192,604	162,281	116,447	167,259
Average wages of production and related workers producing iron ore pellets per hour	$13.72	$14.67	$13.93	$13.86	$14.11
Total compensation of production and related workers producing iron ore pellets 1,000 dollars	381,074	250,589	201,998	148,990	202,198
Average compensation of production and related workers producing iron ore pellets per hour	$14.04	$19.09	$17.34	$17.74	$17.05
Output of production and related workers producing iron ore pellets long tons per hour	2.46	2.39	3.06	3.27	3.45

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

Note.--The data for January-September 1983 and 1984 exclude data for ***, which accounted for *** percent of shipments from pelletizing plants in 1983.

Financial experience of U.S. producers

Income-and-loss data were requested from each operator of iron ore mines on the total iron ore mining and pelletizing operations of the mines they operate. Further financial data were requested from each operator and/or owner on their share of commercial sales of iron ore pellets.

Operators' total mining and pelletizing operations.--Data for iron ore pellets relating to the transactions with owners of mines are presented in table 5. The firms submitting such data accounted for *** percent of shipments of iron ore pellets in 1983. Net sales are valued at each operators' published Lower Lakes or Upper Lakes prices, which do not necessarily reflect market prices. 1/ The Lower Lakes price can be characterized as a composite of the published prices of the four merchant companies and of U.S. Steel Corp. Each company's price is set unilaterally on the basis of perceived market conditions without negotiations with domestic iron ore pellet consumers. 2/ Income and loss on commercial sales of iron ore pellets at transaction prices are discussed later in this section.

Aggregate net sales of iron ore pellets to the owners declined from $2.2 billion in 1981 to $1.2 billion in 1982, or by 47 percent, and then increased by 13.8 percent to $1.3 billion in 1983. During the interim period ended September 30, net sales increased from $865.3 million in 1983 to $1.2 billion in 1984, or by 37 percent.

The *** responding operators of iron ore mines reported aggregate operating income of $482.5 million in 1981, operating losses of $2.1 million in 1982, and operating income of $265.2 million in 1983. Operating income or loss as a share of net sales was 21.8 percent in 1981, (0.2) percent in 1982, and 19.9 percent in 1983. The firms had operating profits in both the 1983 and 1984 interim periods ended September 30; operating income increased from $134.4 million in the 1983 period to $329.1 million in the 1984 period, or by 45 percent. Operating income as a share of net sales in the interim periods was 15.5 percent in 1983 and 27.8 percent in 1984. No firms reported an operating loss in 1981, three had operating losses in 1982, and one reported an operating loss in 1983. In the interim periods ended September 30, one company had an operating loss in 1983; none were reported in 1984. After deducting interest expense, net income or loss before income taxes followed the same pattern as operating income or loss--profitable in 1981, 1983, and in both the 1983 and 1984 interim periods, and a loss in 1982.

Iron ore pellet operations.--Data for iron ore pellets relate to the commercial transactions made by operators and/or owners both under long-term contract and on a spot-market basis. These data are presented in table 6. U.S. producers submitting such data accounted for 100 percent of known commercial shipments of iron ore pellets in 1983.

1/ Prices are discussed more fully in the price section of this report.

2/ Postconference brief of petitioners, pp. 12-13, and a letter from Armco dated Jan. 10, 1985.

Table 5.--Income-and-loss experience of *** operators 1/ of iron ore mines on their total iron ore mining and pelletizing operations, accounting years 2/ 1981-83 and interim periods ended Sept. 30, 1983, and Sept. 30, 1984

Item	1981	1982	1983	Interim period 3/ ended Sept. 30--	
				1983	1984
Quantity sold					
1,000 long tons	50,165	25,382	28,580	18,287	25,328
Net sales made to owners					
1,000 dollars	2,208,148	1,171,650	1,333,591	865,297	1,184,528
Cost of goods sold 4/					
do	1,591,172	1,055,806	991,234	683,170	813,736
Gross profit or (loss)					
do	616,976	115,844	342,357	182,127	370,792
General, selling, and administrative expenses 4/					
do	134,515	117,932	77,169	47,724	41,693
Operating income or (loss)					
do	482,461	(2,088)	265,188	134,403	329,099
Interest expense 5/					
do	156,102	142,577	131,621	87,126	85,803
Net income or (loss) before income taxes					
do	326,359	(144,665)	133,567	47,277	243,296
Depreciation, amortization, and depletion					
do	179,260	132,448	137,441	98,468	107,665
Cash flow or (deficit) from operations					
do	505,619	(12,217)	271,008	145,745	350,961
As a share of net sales:					
Gross profit or (loss)					
percent	27.9	9.9	25.7	21.0	31.3
Operating income or (loss)					
do	21.8	(0.2)	19.9	15.5	27.8
Net income or (loss) before income taxes					
do	14.8	(12.3)	10.0	5.5	20.5
Cost of goods sold					
do	72.1	90.1	74.3	79.0	68.7
General, selling, and administrative expenses					
do	6.1	10.1	5.8	5.5	3.5
Number of firms reporting operating losses	0	3	1	1	0

1/ The *** operators accounted for *** percent of shipments of iron ore pellets in 1983. *** did not provide data for this table.

2/ The accounting year of all *** operators ended on Dec. 31.

3/ *** operators, accounting for *** percent of shipments of iron ore pellets in 1983, provided partial-year data.

4/ 1 operator, ***, included its general, selling, and administrative expenses in its cost of goods sold.

5/ All reporting operators except *** provided interest expense.

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

Table 6.--Income-and-loss experience of 9 U.S. equity owners 1/ on their commercial operations of iron ore pellets, accounting years 2/ 1981-83 and interim periods ended Sept. 30, 1983, and Sept. 30, 1984

Item	1981	1982	1983	Interim period 3/ ended Sept. 30--	
				1983	1984
Quantity sold					
1,000 long tons--	8,999	4,359	4,642	3,439	6,382
Net sales					
1,000 dollars--	384,017	190,992	200,330	145,372	269,941
Cost of goods sold---do----	312,104	200,023	198,817	154,420	225,396
Gross profit or (loss)					
do----	71,913	(9,031)	1,513	(9,048)	44,545
General, selling, and administrative expenses					
do----	11,424	5,028	6,161	4,557	6,074
Operating income or (loss)					
do----	60,489	(14,059)	(4,648)	(13,605)	38,471
Depreciation, amortization, and depletion------do----	31,200	21,741	28,643	21,728	25,629
Cash flow or (deficit) from operations----do----	91,689	7,682	23,995	8,123	64,100
As a share of net sales:					
Gross profit or (loss)					
percent--	18.7	(4.7)	0.8	(6.2)	16.5
Operating income or (loss)----------do----	15.8	(7.4)	(2.3)	(9.4)	14.3
Cost of goods sold					
do----	81.3	104.7	99.2	106.2	83.5
General, selling, and administrative expenses---------do----	3.0	2.6	3.1	3.1	2.3
Number of firms reporting operating losses---------	1	2	2	3	0

1/ The 9 equity owners accounted for 100 percent of known commercial shipments in 1983.

2/ The accounting year of ***.

3/ Data for ***.

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

Most of these trade sales were made under long-term contracts. Long-term contracts typically use some version of the Lower Lakes price as the contractual reference. 1/ Hence, these data may limit the evaluation of actual profitability on the basis of market prices, but they probably represent a trend experienced in this industry during the period covered under this investigation.

Aggregate net sales of iron ore pellets declined from $384.0 million in 1981 to $191.0 million in 1982, or by 50 percent, and then increased by 5 percent to $200.3 million in 1983. During the interim period ended September 30, net sales increased from $145.4 million in 1983 to $269.9 million in 1984, or by 86 percent.

U.S. producers had an operating income of $60.5 million in 1981 and then reported operating losses in 1982 and 1983 of $14.1 million and $4.6 million, respectively. Operating income or loss (loss figures are shown in parentheses) as a share of sales was 15.8 percent in 1981, (7.4) percent in 1982, and (2.3) percent in 1983. For the interim periods ended September 30, the responding firms reported operating losses of $13.6 million in 1983 and operating income of $38.5 million in 1984. Operating income or loss as a share of net sales in the interim periods was (9.4) percent in 1983 and 14.3 percent in 1984. One company reported an operating loss in 1981 and two had operating losses in 1982 and 1983. In the interim periods ended September 30, three firms sustained operating losses in 1983, and none did so in 1984.

The financial experience of this industry was at its worst in 1982 as U.S. production and consumption of iron ore pellets fell to the lowest level in many years because of the severe recession that affected the iron and steel industry. Some of the firms reported shutdown expenses during 1982 and 1983.

Capital expenditures and research and development expenditures.--Data relating to total capital expenditures for buildings, machinery, and equipment used in the production of iron ore pellets and to similarly related research and development expenditures are presented in the following tabulation (in thousands of dollars):

Period	Capital expenditures	Research and development expenditures
1981----------	82,101	5,762
1982----------	41,876	5,551
1983----------	15,947	5,103
Jan.-Sept.--		
1983----------	11,889	3,722
1984----------	10,516	3,690

Capital expenditures declined from $82.1 million in 1981 to $15.9 million in 1983, or by 81 percent. During the interim periods ended September 30, capital expenditures decreased from $11.9 million in 1983 to $10.5 million in

1/ Postconference brief of petitioners, p. 13.

1984, or by 11.5 percent. Research and development expenses fell from $5.8 million in 1981 to $5.1 million in 1983 and were virtually level at $3.7 million in both the 1983 and 1984 interim periods ending September 30.

U.S. producers' statements on the impact of imports from Brazil on their growth, investment, and ability to raise capital.--The Commission requested U.S. producers to describe and explain the actual and potential negative effects, if any, of imports from Brazil of iron ore pellets on their firms' growth, investment, and ability to raise capital. Excerpts of the responses from operators are presented below:

* * * * * * *

Excerpts of responses from owners who are not operators are presented below:

* * * * * * *

Consideration of the Threat of Material Injury

There are various factors that may contribute to the threat of injury to the domestic industry, including the ability of the Brazilian producers to increase the level of exports to the United States and the likelihood they will do so, any increase in U.S. importers' inventories of Brazilian iron ore pellets, and any increasing trends in the quantity of imports from Brazil and/or U.S. market penetration.

The available data concerning Brazil's capacity to produce and export iron ore pellets are presented in the section entitled "The Brazilian Industry" in this report. Another factor that can be examined in assessing the threat of injury is the trend in U.S. importers' inventories. End-of-period inventories of Brazilian iron ore pellets, as reported by importers of Brazilian pellets, are shown in the following tabulation:

Period	Inventories	As a share of domestic shipments	As a share of commercial shipments
	1,000 long tons	Percent	
As of Dec. 31--			
1980	***	***	1/
1981	***	***	***
1982	***	***	***
1983	***	***	***
As of Sept. 30--			
1983	***	***	2/ ***
1984	***	***	2/ ***

1/ Not available.
2/ Based on annualized shipment data.

A discussion of the level of imports and their market penetration is presented in the following section of this report.

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

U.S. imports

Data on U.S. imports of iron ore pellets presented in this section are compiled from responses to Commission questionnaires. Iron ore pellets are classified under item 601.2450 of the TSUSA, which includes other concentrated iron ore. Offical statistics on concentrated iron ore 1/ from Brazil and Canada are shown in table 7. Brazil and Canada are, by far, the principal sources of U.S. imports of iron ore pellets. 2/

Table 7.--Concentrated iron ore: 1/ U.S. imports for consumption from Brazil and Canada, 1978-83, January-September 1983, and January-September 1984

Period	Brazil	Canada	Total
	Quantity (1,000 long tons)		
1978	2,981	15,842	18,823
1979	2,797	17,778	20,575
1980	1,763	14,131	15,894
1981	1,436	15,210	16,646
1982	838	8,671	9,509
1983	1,141	8,772	9,913
Jan.-Sept.--			
1983	866	5,407	6,273
1984	1,236	7,478	8,714
	Percent of total imports		
1978	15.8	84.2	100.0
1979	13.6	86.4	100.0
1980	11.1	88.9	100.0
1981	8.6	91.4	100.0
1982	8.8	91.2	100.0
1983	11.5	88.5	100.0
Jan.-Sept.--			
1983	13.8	86.2	100.0
1984	14.2	85.8	100.0

See footnote at end of table.

1/ Official statistics for TSUSA item 601.2430, under which "not concentrated or sintered" iron ore is classified, are not provided in this report because iron ore pellets are not classified under that item.

2/ Transcript of the conference, p. 68. *** reportedly has imported some iron ore pellets from ***.

Table 7.--Concentrated iron ore: 1/ U.S. imports for consumption from Brazil and Canada, 1978-83, January-September 1983, and January-September 1984--Continued

Period	Brazil	Canada	Total
	Value (1,000 dollars)		
1978	73,049	485,184	558,233
1979	76,183	591,754	667,937
1980	58,243	505,596	563,839
1981	46,093	605,063	651,156
1982	22,764	345,578	368,342
1983	27,314	338,696	366,010
Jan.-Sept.--			
1983	21,465	212,698	234,163
1984	26,679	279,965	306,644
	Unit value (per long ton)		
1978	$24.50	$30.63	$29.66
1979	27.24	33.29	32.46
1980	33.04	35.78	35.47
1981	32.10	39.78	39.12
1982	27.16	39.85	38.74
1983	23.94	38.61	36.92
Jan.-Sept.--			
1983	24.79	39.34	37.33
1984	21.58	37.44	35.19

1/ TSUSA item 601.2450.

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

U.S. imports from Brazil of concentrated iron ore decreased by 6.2 percent in 1979, decreased by 37.0 percent in 1980, decreased by 18.5 percent in 1981 and by 41.6 percent in 1982, and then increased by 36.2 percent in 1983 and by 42.7 percent during January-September 1984 compared with imports in the corresponding period of 1983.

U.S. imports of iron ore pellets from Brazil for 1981-83, January-September 1983, and January-September 1984, as compiled from responses to Commission questionnaires, are shown in the following tabulation: 1/

1/ The import data obtained from responses to Commission questionnaires apparently understate the actual amounts of imports of iron ore pellets from Brazil. See exhibits 4, 6, and 7 of CVRD's postconference brief.

Period	Quantity	Value	Unit value
	1,000 long tons	1,000 dollars	Per long ton
1981	***	***	$50.41
1982	***	***	51.25
1983	312	13,025	41.75
Jan.-Sept.--			
1983	***	***	45.05
1984	1,193	46,697	39.14

U.S. imports from Brazil of concentrated iron ore, by Customs districts, are shown in table 8.

Table 8.--Concentrated iron ore: U.S. imports for consumption from Brazil by Customs districts, 1981-83, January-September 1983, and January-September 1984

(In thousands of long tons)

Customs district	1981	1982	1983	Jan.-Sept.-- 1983	Jan.-Sept.-- 1984
Baltimore	53	0	411	306	462
Philadelphia	1/	0	0	0	413
New Orleans	78	393	573	424	231
Houston	358	222	32	22	101
Mobile	555	211	0	0	0
All other	393	12	126	114	29
Total	1,436	838	1,141	866	1,236

1/ Less than 500 long tons.

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

Market penetration of imports

The estimated ratios of imports of iron ore pellets from Brazil to apparent U.S. consumption are shown in table 9. The ratios decreased irregularly from 1.5 percent in 1978 to *** percent in 1982 but increased to 0.7 percent in 1983 and to 3.0 percent in January-September 1984 compared with *** percent in the corresponding period of 1983. The estimated ratios of imports of iron ore pellets from Brazil to U.S. producers' commercial shipments are shown in table 10. The table indicates that the ratios were

Table 9.--Iron ore pellets: U.S. producers' shipments, imports for consumption, exports, and apparent U.S. consumption, 1978-83, January-September 1983, and January-September 1984

Period	U.S. producers' shipments 1/	Imports from-- 2/		Exports 4/	Apparent U.S. consumption 2/	Ratio of imports from Brazil to consumption
		Brazil	Canada 3/			
	1,000 long tons					Percent
1978	5/ 68,022	6/ 1,148	13,449	4,148	78,471	1.5
1979	5/ 73,325	6/ 1,077	15,111	5,148	84,365	1.3
1980	5/ 60,155	6/ 679	12,011	5,689	67,156	1.0
1981	63,761	***	12,928	5,546	***	***
1982	32,175	***	7,370	3,178	***	***
1983	39,712	312	7,456	3,781	43,699	.7
Jan.-Sept.--						
1983	26,915	***	4,596	2,571	***	***
1984	36,511	1,193	6,356	3,991	40,069	3.0

1/ Total shipments (captive and commercial) from pelletizing plants.

2/ Excludes some imports of iron ore pellets from *** by *** in various years.

3/ It is estimated, on the basis of information provided by counsel for petitioners, that 85 percent of U.S. imports of concentrated iron ore from Canada, as reported in official statistics of the U.S. Department of Commerce, consist of iron ore pellets.

4/ Assumes that 100 percent of U.S. producers' exports of iron ore consist of iron ore pellets.

5/ These data were estimated in the following manner: (1) production data on both iron ore and iron ore pellets were obtained from the Bureau of Mines, U.S. Department of the Interior; (2) Bureau of Mines ratios of pellet production to iron ore production were applied to Bureau of Mines shipment data on iron ore in order to obtain estimated shipments of iron ore pellets; (3) the resulting estimated shipment data were adjusted slightly downward to make them comparable with shipment data in this table for 1981-83, January-September 1983, and January-September 1984, which are based on responses to Commission questionnaires and do not fully cover shipments of the domestic industry. Such data are about 6 percent lower than estimated shipments calculated from Bureau of Mines data.

6/ These data were estimated in the following manner: (1) the aggregate 1981-83 ratio of imports of iron ore pellets from Brazil, as obtained from responses to Commission questionnaires, to total U.S. imports of concentrated iron ore from Brazil, as reported in official statistics of the U.S. Department of Commerce, was calculated; (2) this ratio was applied to total U.S. imports of concentrated iron ore from Brazil, as reported in official statistics of the U.S. Department of Commerce, for each of the years 1978-80.

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

*** percent in 1981, *** percent in 1982, and 6.7 percent in 1983. The ratio was 18.7 percent in January-September 1984 compared with *** percent in the corresponding period of 1983.

Table 10.--Iron ore pellets: U.S. producers' commercial shipments and U.S. imports from Brazil, 1981-83, January-September 1983, and January-September 1984

Period	U.S. producers' commercial shipments	U.S. imports from Brazil	Ratio of imports from Brazil to producers' commercial shipments
	1,000 long tons		Percent
1981	8,999	***	***
1982	4,359	***	***
1983	4,642	312	6.7
Jan-Sept.--			
1983	3,439	***	***
1984	6,382	1,193	18.7

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

Prices

At least 80 percent of total iron ore produced in the United States is consumed by steel companies that wholly or partly own the pelletizing plants. Captive ore pellets are available at mine cost or at market prices and depend on each company's purchasing patterns. The bulk of noncaptive domestic and imported iron ore pellets are purchased through long-term contracts covering periods ranging from 4 or 5 to as many as 25 years. Spot sales are less important than contract sales; petitioners estimated that spot sales represented about 32 percent of total noncaptive market sales of both domestic and imported pellets in 1984. Some of the ore-producing companies have sales contracts extending over the life of the mine, and some of the contracts ***. *** the quantities of ore stipulated in the contract. *** contract prices, and ore-producing companies depend on long-term contracts as collateral to obtain credit to finance their operations.

Demand and prices.--World demand for iron ore pellets is described by industry sources as falling. On the other hand, domestic supply increased in 1983 and 1984. Index prices of iron ore pellets are compared with index prices for all goods, metals and metal products, and iron and steel products in table 11. The table shows that from April 1982 through December 1984, pellet prices have been unchanged while prices of metals and metal products rose by about 4 percent and prices of iron and steel products rose by about 4-1/2 percent.

Table 11.--Producer Price Indexes for specified products, by quarters, January 1982-December 1984

(January-March 1982=100)

Period	All goods	Metals/ metal products	Iron and steel	Iron ore pellets
1982:				
January-March	100.00	100.00	100.00	100.00
April-June	100.11	99.28	99.41	103.98
July-September	100.56	98.76	98.31	103.98
October-December	100.66	98.93	97.84	103.98
1983:				
January-March	100.73	99.74	98.67	103.98
April-June	101.07	100.57	99.53	103.98
July-September	102.05	101.58	100.48	103.98
October-December	102.54	102.40	101.98	103.98
1984:				
January-March	103.69	103.29	103.70	103.98
April-June	104.38	104.48	104.11	103.98
July-September	104.18	103.88	104.24	103.98
October-December	103.89	103.90	104.51	103.98

Source: Compiled from official statistics of the Bureau of Labor Statistics (BLS).

Note.--BLS Producer Price Indexes are based on list prices issued by domestic producers; transaction prices might differ from list prices.

The commercial list price that has traditionally been charged by merchant producers is known as the "Lower Lakes price," the price per long ton of pellets delivered to Cleveland, OH. It is the composite of the published prices of the four large merchant producers and of U.S. Steel Corp. 1/ A price series of the Lower Lakes price is compared with a price series of the so-called world price, which is the price per long ton delivered to Rotterdam, Holland, for the period 1977-84, in table 12. 2/

As shown, Lower Lakes prices increased from $35.52 to $55.62 per long ton from 1977 to 1984, representing an increase of $20.10 per ton (56.6 percent), while world prices declined by $6.44 (19.1 percent) from $33.75 to $27.31 per long ton. From 1982 to 1984, Lower Lakes prices remained unchanged at $55.62 per long ton, but world prices declined from $32.00 to $27.31 per long ton, or by $4.69 (14.7 percent).

1/ In March 1980, the U.S. Department of Justice announced that it was dropping its investigation of price-setting procedures for Lake Superior iron ores and that no antitrust action would be brought. The Department's investigation was begun in 1977.

2/ On an equal basis of 64 percent iron content.

Table 12.--Iron ore pellets: Lower Lakes 1/ and world 2/ prices, 1977-84

Year	Lower Lakes prices		World prices	
	Amount	Index	Amount	Index
	Per long ton	1977=100	Per long ton	1977=100
1977	$35.52	100.00	$33.75	100.00
1978	38.98	109.74	33.42	99.02
1979	43.39	122.16	34.14	101.16
1980	47.14	132.71	38.36	113.66
1981	51.52	145.05	32.64	96.71
1982	55.62	156.59	32.00	94.81
1983	55.62	156.59	29.00	85.92
1984	55.62	156.59	27.31	80.92

1/ Delivered to Cleveland, OH.
2/ Delivered to Rotterdam, Holland.

Source: Compiled from data presented in exhibit 5 of CVRD's postconference brief.

F.o.b. prices.--Sixteen domestic producers and six importers of iron ore pellets were asked to report their average f.o.b. (point of shipment) selling prices, delivered prices, and shipping costs for each calendar quarter from January 1982 through December 1984. Five domestic producers provided the Commission with usable selling price data on prices of the domestically produced pellets (table 13). Prices vary seasonally, with significantly lower prices occurring in the first quarter of each year.

Prices in the first quarter of 1984, at 69 cents per iron unit, were the same as in the first quarter of 1983 and slightly higher than in the first quarter of 1982. Prices during April-September 1984 were lower than in the same period of earlier years, but prices recovered significantly in the third quarter of 1984, from 71 to 76 cents.

Delivered prices.--Because transportation costs are such a large proportion of the delivered price, delivered prices vary widely from customer to customer according to their receiving point. Tabular presentation of these price data would be misleading. Therefore, delivered prices for domestic pellets are presented and discussed on a customer-by-customer basis in the next section. Delivered price data for imported pellets face the same problems, and these data are also presented in that section where specific comparisons of domestic and imported prices are discussed in detail.

Table 13.--Iron ore pellets: Domestic producers' weighted average f.o.b. prices, by quarters, January 1982-September 1984

(Cents per iron unit)

Period	Domestic producers' prices
1982:	
January-March	67
April-June	77
July-September	78
October-December	78
1983:	
January-March	69
April-June	75
July-September	77
October-December	77
1984:	
January-March	69
April-June	71
July-September	76

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

Purchases and prices reported by customers of Brazilian iron ore pellets

The Commission requested domestic producers to supply information concerning sales they lost to imports of iron ore pellets from Brazil and information on instances in which they were forced to reduce prices because of competition from Brazil. Domestic producers cited nine customers with which they allegedly lost sales or experienced lost revenues. Major customers of Brazilian iron ore pellets were contacted by the Commission's staff, and purchases, including purchase prices, are discussed below.

* * * * * * *

Lost revenues

* * * * * * *

Transportation costs

Transportation costs are important because they usually account for 20 percent to 40 percent of the delivered cost of iron ore pellets at consuming plants. The cost of transportation usually defines the competitive market area for ore from a particular mine or district. According to the U.S. Bureau of Mines "Mineral Commodity Profiles, Iron Ore" publication, Lake

Superior ores are most competitive at Lake coastal locations. In early 1983, the delivered cost of Lake Superior pellets averaged about $56 per ton at steel plants in the Gary, Chicago, Detroit, or Cleveland areas, and about $64 per ton in the Pittsburgh area; if delivered to the east coast, the cost would be $75 to $80 per ton. On the other hand, Brazilian pellets were reportedly available on the east coast at $30 to $35 per ton and in Pittsburgh at $45 to $50 per ton. Published U.S. railroad freight rates for iron ore are equivalent to 4 to 7 cents per ton mile, compared with about 0.8 cent for lake freight and 0.2 cent or less for ocean freight. Most of the Brazilian pellets imported during January-September 1984 arrived in *** and were transported to consuming plants in ***. Other Brazilian pellets arrived in ***. Domestic producers' main sales are confined to the Great Lakes area because of the high cost of transporting the ore inland by rail.

Data received by the Commission on f.o.b. and delivered purchase prices from the four importer/purchasers that reported these prices to the Commission show that the average cost of transportation (the difference between the f.o.b. price and the delivered price) of U.S. pellets to principal consuming areas of domestic pellets was 22.6 cents per iron unit, or approximately 30 percent of the average f.o.b. price of 74 cents per iron unit; the average cost of transportation of Brazilian pellets to consuming areas was 21.5 cents per iron unit, or approximately 32 percent of the average f.o.b price of 66.3 cents per iron unit. These data conform with the Bureau of Mines estimates of transportation costs shown above.

Exchange rates

The nominal value of the U.S. dollar appreciated steadily relative to the Brazilian cruzeiro from January 1982 through September 1984 (table 14). The dollar in real terms, however, did not appreciate as much because of the higher Brazilian inflation rates relative to those in the United States.

Table 14.--Nominal and real exchange rates of the U.S. dollar per Brazilian cruzeiro, by quarters, January 1982-September 1984

(January-March 1982=100)

Period	Nominal rates	Real rates
1982:		
January-March	100.00	100.00
April-June	86.07	103.85
July-September	72.69	103.20
October-December	59.86	98.19
1983:		
January-March	42.21	86.35
April-June	28.97	78.06
July-September	21.66	82.80
October-December	15.86	85.07
1984:		
January-March	12.10	84.59
April-June	9.10	83.93
July-September	3.53	83.56

Source: International Financial Statistics, January 1985.

Note.--Real exchange rates are nominal market rates adjusted by relative wholesale price indexes.

APPENDIX A

THE COMMISSION'S NOTICE OF INSTITUTION OF A PRELIMINARY COUNTERVAILING DUTY INVESTIGATION

[Investigation No. 701-TA-235 (Preliminary)]

Iron Ore Pellets From Brazil

AGENCY: International Trade Commission.

ACTION: Institution of a preliminary countervailing duty investigation and scheduling of a conference to be held in connection with the investigation.

SUMMARY: The Commission hereby gives notice of the institution of preliminary countervailing duty investigation No. 701-TA-235 (Preliminary) under section 703(a) of the Tariff Act of 1930 (19 U.S.C. 1671b(a)) to determine whether there is a reasonable indication that an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports from Brazil of iron ore pellets.

provided for in item 601.24 of the Tariff Schedules of the United States, which are alleged to be subsidized by the Government of Brazil. As provided in section 703(a), the Commission must complete preliminary countervailing duty investigations in 45 days, or in this case by February 4, 1985.

For further information concerning the conduct of this investigation and rules of general application, consult the Commission's Rules of Practice and Procedure, Part 207, Subparts A and B (19 CFR Part 207), and Part 201, Subparts A through E (19 CFR Part 201).

EFFECTIVE DATE: January 20, 1985.

FOR FURTHER INFORMATION CONTACT: George L. Deyman (202-523-0481), Office of Investigations, U.S. International Trade Commission, 701 E Street NW., Washington, DC 20436.

SUPPLEMENTARY INFORMATION:

Background. This investigation is being instituted in response to a petition filed on December 20, 1984 by The Cleveland-Cliffs Iron Company, Oglebay Norton Company, Pickands Mather & Co., and the United Steelworkers of America, on behalf of the domestic iron ore pellet industry.

Participation in the investigation. Persons wishing to participate in the investigation as parties must file an entry of appearance with the Secretary to the Commission, as provided in 201.11 of the Commission's rules (19 CFR 201.11), not later than seven (7) days after publication of this notice in the Federal Register. Any entry of appearance filed after this date will be referred to the Chairwoman, who will determine whether to accept the late entry for good cause shown by the person desiring to file the entry.

Service list. Pursuant to 201.11(d) of the Commission's rules (19 CFR 201.11(d)), the Secretary will prepare a service list containing the names and addresses of all persons, or their representatives, who are parties to this investigation upon the expiration of the period for filing entries of appearance. In accordance with § 201.16(c) of the rules (19 CFR 201.16(c)), each document filed by a party to the investigation must be served on all other parties to the investigation (as identified by the service list), and a certificate of service must accompany the document. The Secretary will not accept a document for filing without a certificate of service.

Conference. The Commission's Director of Operations has scheduled a conference in connection with this investigation for 9:30 a.m. on January 10, 1985 at the U.S. International Trade Commission Building, 701 E Street NW., Washington, DC. Parties wishing to participate in the conference should contact George L. Deyman (202-523-0481) not later than January 7, 1985 to arrange for their appearance. Parties in support of the imposition of countervailing duties in this investigation and parties in opposition to the imposition of such duties will each be collectively allocated one hour within which to make an oral presentation at the conference.

Written submissions. Any person may submit to the Commission on or before January 14, 1985 a written statement of information pertinent to the subject of the investigation, as provided in § 207.15 of the Commission's rules (19 CFR 207.15). A signed original and fourteen (14) copies of each submission must be filed with the Secretary to the Commission in accordance with § 201.8 of the rules (19 CFR 201.8). All written submissions except for confidential business data will be available for public inspection during regular business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary to the Commission.

Any business information for which confidential treatment is desired must be submitted separately. The envelope and all pages of such submissions must be clearly labeled "Confidential Business Information." Confidential submissions and requests for confidential treatment must conform with the requirements of § 201.6 of the Commission's rules (19 CFR 201.6, as amended by 49 FR 32569, Aug. 15, 1984).

Authority: This investigation is being conducted under authority of the Tariff Act of 1930, title VII. This notice is published pursuant to § 207.12 of the Commission's rules (19 CFR 207.12).

By order of the Commission.

Issued: December 21, 1984.

Kenneth R. Mason,

Secretary.

[FR Doc. 84-33647 Filed 12-26-84; 8:45 am]

BILLING CODE 7020-02-M

[701-TA-235 (Preliminary)]

Iron Ore Pellets From Brazil; Correction

In FR Doc. 84-33647, published in the Federal Register beginning on page 50314 in the issue of Thursday, December 27, 1984, the effective date appeared incorrectly. It should have been December 20, 1984 instead of January 20, 1985. The incorrect date appeared in the sixteenth line of the first column on page 50315.

By Order of the Commission.

Issued: January 3, 1985.

Kenneth R. Mason,

Secretary.

[FR Doc. 85-644 Filed 1-8-85; 8:45 am]

BILLING CODE 7020-02-M

APPENDIX B

CALENDAR OF THE COMMISSION'S PUBLIC CONFERENCE

CALENDAR OF PUBLIC CONFERENCE

Investigation No. 701-TA-235 (Preliminary)

IRON ORE PELLETS FROM BRAZIL

Those listed below appeared as witnesses at the United States International Trade Commission's conference held in connection with the subject investigation on January 10, 1985, in the hearing room of the USITC Building, 701 E Street, NW., Washington, DC.

Congressional appearances

Honorable James L. Oberstar, United States Representative,
State of Minnesota

Honorable Robert W. Davis, United States Representative,
State of Michigan

In support of the imposition of countervailing duties

Jones, Day, Reavis & Pogue—Counsel
Washington, DC
on behalf of

The Cleveland-Cliffs Iron Company
Oglebay Norton Company
Pickands Mather & Co.

Robert M. McInnes, President
Pickands Mather & Co.

Renold D. Thompson, President
Oglebay Norton Company

Samuel K. Scovil, Chairman
The Cleveland-Cliffs Iron Co.

Stanley Nehmer, President
Economic Consulting Services, Inc.

Mark Love, Vice President
Economic Consulting Services, Inc.

Herbert J. Hansell)
Christopher F. Dugan) —OF COUNSEL

United Steelworkers of America, AFL-CIO

Carl B. Frankel, Associate General Counsel

Edgar Ball, International Secretary

Eldon Kirsch, Minnesota District Director

In opposition to the imposition of countervailing duties

Briger & Associates—Counsel
New York, NY
on behalf of

Companhia Vale do Rio Doce

Samir Zraick, President
Rio Doce America

David Waring, Commercial Director
Rio Doce America

Peter F. Marcus, First Vice President
PaineWebber, Inc.

Peter L. Briger—OF COUNSEL

APPENDIX C

THE DEPARTMENT OF COMMERCE'S NOTICE OF INSTITUTION OF A COUNTERVAILING DUTY INVESTIGATION

[C-351-408]

Initiation of Countervailing Duty Investigation; Iron Ore Pellets From Brazil

AGENCY: Import Administration, International Trade Administration, Commerce.

ACTION: Notice.

SUMMARY: On the basis of a petition filed in proper form with the U.S. Department of Commerce, we are initiating a countervailing duty investigation to determine whether the manufacturers, producers, or exporters in Brazil of iron ore pellets, as described in the "Scope of Investigation" section below, receive benefits which constitute subsidies within the meaning of the countervailing duty law. We are notifying the U.S. International Trade Commission (ITC) so that it may determine whether imports of the subject merchandise materially injure or threaten material injury to a U.S. industry. The petition also alleges that "critical circumstances" exist within the meaning of section 703(e)(1) of the Act. If our investigation proceeds normally, we will make our preliminary determination on or before March 15, 1985.

EFFECTIVE DATE: January 16, 1985.

FOR FURTHER INFORMATION CONTACT: Laurel LaCivita or Vincent Kane, Office of Investigations, Import Administration, International Trade Administrtion, U.S. Department of Commerce, 14th Street & Constitution Avenue NW, Washington, D.C. 20230. Telephone (202) 377-3530 or 377-5414.

SUPPLEMENTARY INFORMATION:

Petition

On December 20, 1984, we received a petition from the Cleveland-Cliffs Iron Company, Oglebay Norton Company, Picklands Mather & Company, merchant producers of iron ore pellets, and the United Steelworkers of America, the union which represents the production and maintenance workers of the merchant producers at their iron ore producing facilities, filed on behalf of the iron ore pellets producers who comprise the U.S. industry. In compliance with the filing requirements of § 355.26 of the Commerce Regulations (19 CFR 355.26), the petition alleges that manufacturers, producers, or exporters of iron ore pellets in Brazil directly or indirectly receive benefits which constitute subsidies within the meaning of section 701 of the Tariff Act of 1930, as amended (the Act), and that these imports materially injure or threaten material injury to a U.S. industry. In addition, the petition alleges that "critical circumstances" exist within the meaning of section 703(e)(1) of the Act. Brazil is a "country under the Agreement" within the meaning of section 701(b) of the Act; therefore Title VII of the Act applies to this investigation and an injury determination is required.

Initiation of Investigation

Under section 702(c) of the Act, within 20 days after a petition is filed, we must determine whether the petition sets forth the allegations necessary for the initiation of a countervailing duty investigation and whether it contains information reasonbly available to the petitioner supporting the allegations. We have examined the petition on iron ore pellets from Brazil and we have found that the petition meets those requirements. Therefore, we are initiating a countervailing duty investigation to determine whether manufacturers, producers, or exporters in Brazil of iron ore pellets, as described in the "Scope of the Investigation" section of this notice, receive benefits which constitute subsidies. If our investigation proceeds normally, we will make our preliminary determination by March 15, 1985.

Scope of the Investigation

The merchandise covered by this investigation is iron ore pellets, which are defined for purposes of this proceeding as: fine particles of iron oxide, hardened by heating and formed into balls of ⅝" and ⅜" for use in blast furnaces to obtain pig iron, as currently provided for in items 601.2430 and 601.2450 of the *Tariff Schedules of the United States, Annotated* (TSUSA).

Allegations of Subsidies

The petition alleges that Brazilian manufacturers, producers, or exporters of iron ore pellets receive benefits which constitute subsidies. We are initiating an investigation on the following allegations:

- Working Capital Financing for Export—Resolutions 674 and 882/950.
- Export Financing Under CIC-CREGE 14-11 Circular.
- Guarantees for Long-Term Foreign-Currency Loans.
- FINEX Export-Financing Program—Resolution 68.
- Financing for Storage of Export Merchandise Program—Resolution 330.
- PROEX—Export Promotion Credit.
- Income Tax Exemption for Export Earnings—Decree-Laws 1158 and 1721.
- Accelerated Deprectation of Equipment—Decree-Law 113/.
- IPI Export-Credit Premium.
- Industrial Development Council (CDI) Program—Exemption of IPI Tax and Customs Duties on Imported Equipment—Decree-Laws 1428 and 1726.
- Tax Reductions on Export-Production Equipment—Decree-Law 1428
- BEFIEX—Decree-Laws 77065 and 1219
- Mineral Tax Reductions on Iron Ore Exports
- Mineral Tax Basis Calculation Incentives
- Mining Industry Incentives
- Government Long-Term Loans (BNDES and FINAME)
- Regional Incentives under the Grande Carajas Program
- Carajas Infrastructure Subsidies

We have determined not to initiate on the following allegations:

1. *Government Assistance in Repaying Foreign Loans (Aviso GB-588).* Aviso GB-588 is an internal government communication which provides that under certain circumstances, the government of Brazil will assume obligations on the direct dollar debt of companies unable to meet such overseas debt as it comes due. Under the program, the Banco do Brasil assumes payments due overseas lenders

with funds provided by the Central Bank (Banco Central do Brasil). The assumed payments are converted into cruzeiro loans from the Banco do Brasil to the companies. The program is open to any company that has incurred such debt subject to a government guarantee.

In our Final Affirmative Countervailing Duty Determination on Certain Carbon Steel Products from Brazil (49 FR 13726) of April 6, 1984, we determined that the Aviso GB–588 program is available to all companies unable to meet scheduled payments on government-guaranteed direct-dollar debt; it does not operate for the sole benefit of any one industry or group of industries. Consequently, we found this program to be generally available and therefore not countervailable. The petition presents no new evidence of changed circumstances with respect to this program; we will not consider it at this time.

2. *IPI Rebates for Capital Investment.* Decree-Laws 1547 and 1843 provide incentives for firms producing basic steel and certain fabricated steel products and do not apply to this investigation. Therefore, we will not examine it at this time.

3. *Investment in the Carajas Iron Ore Mine.* Petitioners allege that the Companhia Vale do Rio Doce (CVRD), a company in which the government of Brazil has majority ownership, will provide $1.88 billion in equity to the Serro do Carajas iron ore mine project. Petitioners estimate that CVRD will suffer massive losses in undertaking this investment and therefore the investment is inconsistent with commercial considerations.

Based on the information in the petition, the Carajas iron ore mine project appears to be an expansion of CVRD's operations. A variety of sources fund the project: CVRD provides equity; BNDES, foreign and international banks provide long-term loans. Despite majority government ownership of CVRD, there is no evidence that the government of Brazil provided equity infusions into CVRD to finance the project, nor do there appear to be government equity infusions into the project itself.

The Department has consistently held that government ownership *per se* does not confer a subsidy. That CVRD chooses to invest in this project does not mean that the government is investing these funds. Absent new government participation in CVRD, or government equity infusions into the project, we are not investigating CVRD's investment in the Carajas iron ore mine project.

Allegation of Critical Circumstances

Petitioners allege that critical circumstances exist with respect to imports of iron ore pellets from Brazil. They claim that the subject merchandise benefits from export subsidies that are inconsistent with the Agreement (the Subsidies Code), and that imports have been massive over a relatively short period.

Notification of ITC

Section 702(d) of the Act requires us to notify the U.S. International Trade Commission (ITC) of this action, and to provide it with the information we used to arrive at this determination. We will notify the ITC and make available to it all nonprivileged and nonconfidential information. We will also allow the ITC access to all privileged and confidential information in our files, provided it confirms that it will not disclose such information, either publicly or under an administrative protective order, without the written consent of the Deputy Assistant Secretary for Import Administration.

Preliminary Determination by ITC

The ITC will determine by February 4, 1985, whether there is a reasonable indication that imports of iron ore pellets from Brazil materially injure or threaten material injury to a U.S. industry. If ITC's determination is negative, the investigation will be terminated, otherwise, the investigation will proceed to conclusion.

January 9, 1985.

Alan F. Holmer,

Deputy Assistant Secretary for Import Administration.

[FR Doc. 85–1200 Filed 1–15–85; 8:45 am]

BILLING CODE 3510–25–M