Ferrosilicon From Egypt

Investigation No. 731-TA-642 (Final)

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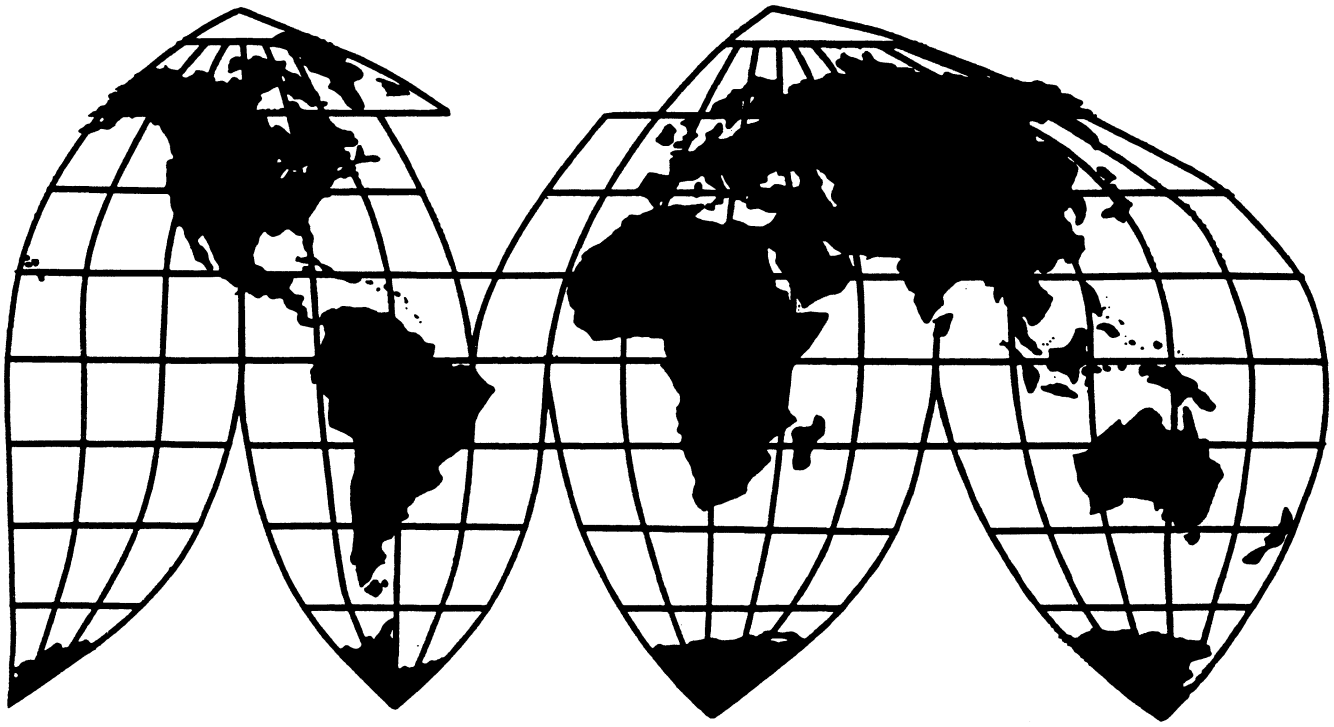

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U.S. International Trade Commission

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PART I

DETERMINATION AND VIEWS OF THE COMMISSION

UNITED STATES INTERNATIONAL TRADE COMMISSION

FERROSILICON FROM EGYPT
Investigation No. 731-TA-642 (Final)

DETERMINATION

On the basis of the record[1] developed in the subject investigation, the Commission determines,[2] pursuant to section 735(b) of the Tariff Act of 1930 (the Act),[3] that an industry in the United States is not materially injured or threatened with material injury, and the establishment of an industry in the United States is not materially retarded, by reason of imports from Egypt of ferrosilicon,[4] that have been found by the Department of Commerce to be sold in the United States at less than fair value (LTFV).

BACKGROUND

The Commission instituted this investigation effective June 25, 1993, following a preliminary determination by the Department of Commerce that imports of ferrosilicon from Egypt were being sold at LTFV within the meaning of section 733(b) of the Act.[5] Notice of the institution of the Commission's investigation and of a public hearing 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* on July 23, 1993.[6] The hearing was held in Washington, DC, on September 14, 1993, and all persons who requested the opportunity were permitted to appear in person or by counsel.

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

[2] Chairman Newquist dissenting.

[3] 19 USC § 1673d(b).

[4] For purposes of this investigation, the subject product is ferrosilicon, a ferroalloy generally containing, by weight, not less than 4 percent iron, more than 8 percent but not more than 96 percent silicon, not more than 10 percent chromium, not more than 30 percent manganese, not more than 3 percent phosphorus, less than 2.75 percent magnesium, and not more than 10 percent calcium or any other element. Ferrosilicon is classified in subheadings 7202.21.10, 7202.21.50, 7202.21.75, 7202.21.90, and 7202.29.00 of the Harmonized Tariff Schedule of the United States (HTS).

[5] 19 USC § 1673b(b).

[6] 58 F.R. 39566.

VIEWS OF THE COMMISSION

Based on the record in this investigation, we determine that an industry in the United States is not materially injured or threatened with material injury by reason of imports of ferrosilicon from Egypt that the U.S. Department of Commerce ("Commerce") has determined are being sold in the United States at less than fair value ("LTFV").[1] [2]

I. Like Product and Domestic Industry

In this, as in other investigations under Title VII of the Tariff Act of 1930 (the "Act"), we must first define the "like product" and the "industry". Section 771(4)(A) of the Act defines the relevant industry as "the domestic producers as a whole of a like product, or those producers whose collective output of the like product constitutes a major proportion of the total domestic production of that product . . ."[3] In turn, the statute defines "like product" 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. . ."[4]

The Commission's like product determinations are factual, and the Commission applies the statutory standard of "like" or "most similar in characteristics and uses" on a case by case basis.[5] No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.[6] Generally, the Commission requires "clear dividing lines among possible like products" and disregards minor variations among them.[7]

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[1] Whether the establishment of an industry in the United States is materially retarded is not an issue in this investigation.

[2] Chairman Newquist finds that the domestic industry producing ferrosilicon is materially injured by reason of LTFV ferrosilicon imports from Egypt. He joins in the majority's discussion of Like Product, Domestic Industry and Condition of the Industry. *See* Dissenting Views of Chairman Newquist.

[3] 19 USC § 1677(4)(a).

[4] 19 USC § 1677(10).

[5] *Torrington Company v. United States*, 747 F. Supp. 744, 748-749 (CIT 1990), *aff'd* 938 F.2d 1278 (1991). In analyzing like product issues, the Commission generally considers a number of factors including: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) common manufacturing facilities and production employees; (5) customer or producer perceptions; and, where appropriate, (6) price. *Calabrian Corp. v. United States*, 794 F. Supp. 377, 382 n. 4 (CIT 1992); *Torrington*, 747 F. Supp. at 749; *Asociacion Colombiana de Exportadores de Flores v. United States*, 693 F. Supp. 1165, 1168 n. 4, 1180 n. 7 (CIT 1988).

[6] *See* S. Rep. No. 249, 96th Cong., 1st Sess. 90-91 (1979); *Torrington*, 747 F. Supp. at 748-49.

[7] *Torrington*, 747 F. Supp. at 748-49.

Commerce has defined the imported product subject to these investigations as:

> *ferrosilicon, a ferroalloy generally containing, by weight, not less than four percent iron, more than eight percent but not more than 96 percent silicon, not more than 10 percent chromium, not more than 30 percent manganese, not more than three percent phosphorous, less than 2.75 percent magnesium, and not more than 10 percent calcium or any other element.*[8]

Ferrosilicon is used primarily as an alloying agent in the production of iron and steel[9] and also may be used by steelmakers as a deoxidizer and a reducing agent, and by cast iron producers as an inoculant.[10] It is produced by smelting iron and silicon in a submerged-arc electric furnace. The great majority of ferrosilicon produced in the United States and consumed by the iron and steel foundries consists of commodity grades of ferrosilicon 50 and ferrosilicon 75. Generally, ferrosilicon is available in commodity and specialty grades. A very small percentage of apparent domestic consumption is accounted for by specialty grades, including 65 percent ferrosilicon and proprietary grades.[11]

The production process creates some waste and by-products that can be recycled by the producer or processed and sold to some end-users in the steel and iron foundry industries.[12] For example, slag that forms on the surface of molten metal in the ladle after the pouring of the "prime" product may be crushed, sized, and combined with fines or other material for sale to iron foundries.[13] Fines are created both in the production and shipping of primary ferrosilicon products because ferrosilicon crumbles easily.[14] Unprocessed fines may be used as a liner in the casting process, as filler in cement and chemical industries, and in roadbed construction.[15] If processed into briquettes, fines may be used by iron foundries as an alloying agent.[16] Off-specification material that may be created when furnaces

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[8] 58 F.R. 48037 (Sept. 14, 1993).

[9] *See* Report at II-7.

[10] Report at II-7-8.

[11] Report at II-5-7.

[12] *See* Report at II-11, stating that the production process in the domestic ferrosilicon industry normally yields approximately 3 percent waste in the form of slag, skimmings, furnace or ladle rakeouts, ladle skulls, and fines. Inefficient furnace operations tend to create more waste and by-products than efficient operations. Slag is defined as ladle surface scum that contains silicon and oxidized impurities. This material is also referred to as dross and skimmings. Rakeouts and skulls are defined as material that builds up on the inside of the ladle and is removed periodically. *See* Report at II-5.

[13] *Id.* at II-11.

[14] Petitioners' Prehearing Br. at 6.

[15] Report at II-11.

[16] *Id.*

operate outside of normal parameters may also be blended with other materials containing silicon and then sold to iron foundries and steel mills.[17]

In our preliminary determinations on ferrosilicon imports from Egypt and Brazil and our final determinations on imports from the People's Republic of China, Kazakhstan, Russia, Ukraine and Venezuela, we found that all grades of ferrosilicon constituted one like product.[18] While the parties to this final investigation do not dispute our previous like product findings,[19] they have raised new arguments concerning whether slag, fines, and off-specification material properly are included within the "all ferrosilicon" like product.[20]

Petitioners contended that these products properly are included within the all ferrosilicon like product developed in our previous ferrosilicon determinations.[21] Egyptian respondents have argued, however, that these materials are a separate like product, based on the fact that they are unintentional waste and by-products of primary ferrosilicon production and must be processed prior to end-use by steel or iron foundries.[22]

As in our earlier determinations concerning high-silicon content and low-silicon content ferrosilicon, in this investigation we find that there is no clear dividing line between slag, fines, and off-specification material and other types of ferrosilicon; we therefore find one like product consisting of all ferrosilicon.[23] We have examined

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[17] Report at II-8 and II-11.

[18] For a discussion of our previous like product determinations, including discussion about grades of ferrosilicon, *See Ferrosilicon from Brazil and Egypt*, Invs. Nos. 731-TA-641 and 642 (Preliminary), USITC Pub. 2605 (February 1993) at 6-7; *Ferrosilicon from the People's Republic of China*, Inv. No. 731-TA-566 (Final), USITC Pub. 2607 (March 1993) at 6-7; *Ferrosilicon from Kazakhstan and Ukraine*, Invs. Nos. 731-TA-566 and 569 (Final), USITC Pub. 2616 (March 1993) at 6-7; *Ferrosilicon from Russia and Venezuela*, Invs. Nos. 731-TA-568 and 570 (Final), USITC Pub. 2650 (June 1993) at 6-7.

[19] For ease of reference in the discussion that follows, we refer to this like product as the "all ferrosilicon" like product.

[20] Both Egyptian respondents and petitioners have misplaced the focus of their like product arguments on imports from Egypt of slag, fines and off-specification material rather than on the domestic counterparts of these products. The statute requires the Commission to focus on the domestic product which is like or most similar to the subject imports when determining material injury. *See* 19 USC 1677(10); *Asocoflores*, 693 F. Supp. 1165, 1167. Accordingly, after determining that all domestic ferrosilicon, including slag, fines and off-specification material are the products most like the imports from Egypt, the proper focus of our inquiry was on whether domestic slag, fines, and off-specification material are sufficiently different from domestic standard ferrosilicon to warrant categorizing them as a separate like product.

[21] Petitioners' Prehearing Br. at 6-9.

[22] *See* Egyptian respondents' Prehearing Br. at 29-33.

[23] Commissioner Brunsdale's determination that slag, fines, and off-specification ferrosilicon are in the same like product as primary ferrosilicon is based on the fact that all of these products are produced in the same furnaces and as part of the same production process. Particularly in cases such as this where the slag and fines are by-products or waste-products

(continued...)

this like product issue in light of the traditional like product factors. We find that, in this particular investigation, the factors that weigh most heavily in reaching our determination of a single like product are that all ferrosilicon is produced in the same manufacturing facilities using the same production employees,[24] as part of the same production process, and that the predominant physical characteristics and end-use of all ferrosilicon products are related to their silicon content.[25]

The fact that production of slag, fines and off-specification materials is ancillary to primary ferrosilicon production fundamentally links these products together and outweighs the differences among them. We recognize that not all types and grades of ferrosilicon are interchangeable with all other types and grades of ferrosilicon products.[26] Further, customer and producer perceptions differ based on the metallurgical properties of the various grades and types of ferrosilicon products; channels of distribution of domestic slag and fines also may differ from channels of distribution of commodity and specialty grade ferrosilicon products.[27] However, these differences are not significant enough to establish any clear dividing line on the continuum of all ferrosilicon products.[28] We accordingly find that the like product consists of all ferrosilicon, including slag, fines, off-specification material, commodity grade and specialty grade products.

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[23] (...continued)
that are not the intentional result of the production process, defining two or more like products would make no economic sense and would create significant difficulties in attempting to identify the condition of the resulting multiple industries and the effects of dumping on these individual industries. Commissioner Brunsdale has reached a similar conclusion in at least two previous cases. (See Silicon Carbide from the People's Republic of China, Inv. No. 731-TA-651 (Preliminary), USITC Pub. 2668 (August 1993) at 10, n. 38 and New Steel Rails from Canada, Invs. Nos. 701-TA-297 (Final) and 731-TA-422 (Final), USITC Pub. 2217 (August 1989) at 89-90 (Dissenting Views of Chairman Anne E. Brunsdale).)

[24] While slag and fines may undergo some additional processing after primary production that is unnecessary for commodity and specialty grade ferrosilicon products, processing is ancillary to primary production and does not alter the fact that the primary production process of all ferrosilicon products is the same.

[25] Report at II-7-8.

[26] *See* footnote 18 *supra*.

[27] The former products are sold only to processors, whereas the latter are sold predominantly to end-users. Report at II-27; *see also* footnote 18 *supra*.

[28] *Compare Certain Flat-Rolled Carbon Steel Products from Argentina, Australia, Austria, Belgium, Brazil, Canada, Finland, France, Germany, Italy, Japan, Korea, Mexico, the Netherlands, New Zealand, Poland, Romania, Spain, Sweden, and the United Kingdom*, Invs. Nos. 701-TA-319-332, 334, 336-342, 334, and 347-353 (Final) and 731-TA-573-579, 581-592, 594-597, 599-609, and 612-619 (Final), USITC Pub. 2664 (August 1993) at 12 ("Flat-Rolled Steel"); *Industrial Nitrocellulose from Brazil, Japan, People's Republic of China, Republic of Korea, United Kingdom, West Germany, and Yugoslavia*, Invs. Nos. 731-TA-439-445 (Preliminary), USITC Pub. 2231 at 6, n. 17 (Nov. 1989); *New Steel Rails from Canada*, Invs. Nos. 701-TA-297 (Final) and 731-TA-422 (Final), USITC Pub. 2217 at 10 (September 1989).

II. Domestic Industry

Section 771(4)(A) of the Tariff Act of 1930 defines domestic industry as:

> *. . . the domestic producers as a whole of a like product, or those producers whose collective output of the like product constitutes a major proportion of the total domestic production of that product.*[29]

In this final investigation, we have considered whether domestic processors of ferrosilicon slag, fines and off-specification material should be included in the domestic industry producing ferrosilicon. While no party argued in favor of their inclusion, Egyptian respondents' arguments concerning the extent to which the processors add value to the imports from Egypt prior to resale to end-users in the steel and iron foundry industries have led us to consider this issue.

Petitioners argued that domestic processors of ferrosilicon should not be included in the domestic industry producing ferrosilicon because the processing primarily involves crushing, screening, blending, and briquetting operations that require low capital investments and no technical expertise,[30] add insignificant value to finished products, and are performed by a large number of firms.[31] Any value that is added in processing, they argued, results from blending the waste and by-products with *** rather than from the processing of the material itself.[32]

Egyptian respondents argued that processors do not perform simply gross manipulations of the Egyptian product, but custom blend material to suit a customer's needs using "know-how" specific to a processor.[33] They alleged that significant value is added by the processing activities: *i.e.*, briquetting fines adds 30 percent to 55 percent to their value,[34] and processing of slag may add in excess of 100 percent to

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[29] 19 USC §1677(4)(A).

[30] One domestic ferrosilicon producer claims that the cost of its own equipment used in the processing of slag represent less than 1 percent of its overall capital expenditures for ferrosilicon production. *See* Petitioners' Posthearing Br., exhibit 6 at 7.

[31] *See* Petitioners' Posthearing Br., exhibit B at 2 and 5-7. Petitioners also state that processing may be performed by ferrosilicon producers themselves. *See* Petitioners' Posthearing Br., exhibit 6 at 6.

[32] *Id.* at 6; *see also* Petitioners' Prehearing Br. at 7-8. Petitioners stated that the processing of Egyptian material does not differ significantly from the processing of domestic material. They estimated that processing performed by American Alloys on its slag adds approximately 10 percent to its value and that briquetting of fines adds approximately 15 percent to their value. *See* Petitioners' Posthearing Br., exhibit 6 at 7-8.

[33] Egyptian respondents' Posthearing Br. at 7 and 8. They also stated that not all processors custom-blend products and that this activity distinguishes processors of Egyptian material from other processors.

[34] Egyptian respondents' Posthearing Br., Answers to Commissioners' Questions at 5.

its value.[35] Finally, they stated that processing activities take anywhere from several weeks to several months because processing often involves blending of various processed materials that are not available simultaneously.[36]

In deciding whether a firm qualifies as a domestic producer, the Commission typically examines such factors as:

(1) the extent and source of a firm's capital investment;
(2) the technical expertise involved in U.S. production activity;
(3) the value added to the product in the United States;
(4) employment levels;
(5) the quantities and types of parts sourced in the United States; and
(6) any other costs and activities in the United States leading to production of the like product, including where production decisions are made.[37]

No single factor is determinative and the Commission also has stated that it will consider any other factors it deems relevant in light of the specific facts of any investigation.[38]

In this investigation, we find that processors are not part of the domestic industry producing ferrosilicon. Information on the record indicates that processors' capital investments are small in relation to the domestic firms producing commodity and specialty grade ferrosilicon products.[39] Additionally, while the technical expertise involved in processing activities differs to some extent based on the specific processing being performed, these processing activities -- crushing, screening, and blending of materials -- require relatively low amounts of technical expertise overall.[40]

The parties have presented starkly contrasting evidence on the amount of value added by processing activities, with estimates ranging from less than 10 percent

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[35] Egyptian respondents' Prehearing Br. at 32, citing Prehearing Staff Report at 15.

[36] Egyptian respondents' Posthearing Br., Answers to Commissioner Nuzum's Questions at 11.

[37] *See Certain Compact Ductile Iron Waterworks Fittings and Accessories thereof from the People's Republic of China*, Inv. No. 731-TA-621 (Final), USITC Pub. 2671 at 22 (August 1993); *Dry Film Photoresist from Japan*, Inv. No. 731-TA-266 (Preliminary), USITC Pub. 2555 (August 1992) at 14; *Dynamic Random Access Memories of One Megabit and Above from the Republic of Korea*, Inv. No. 731-TA-556 (Preliminary), USITC Pub. 2519 (June 1992) at 11-12.

[38] *Dry Film*, USITC Pub. 2555 at 38; *Erasable Programmable Read Only Memories from Japan*, Inv. No. 731-TA-288 (Final), USITC Pub. 1927 (December 1986); *Color Television Receivers from the Republic of Korea and Taiwan*, Invs. Nos. 731-TA-134 and 135 (Final), USITC Pub. 1514 (May 1984) at 7-8.

[39] Notes of staff conversation with *** on Sept. 30, 1993.

[40] Record evidence indicates that processing activities involve visual inspection of materials, sorting, screening, crushing and blending. Blending is often accomplished manually with front-end loaders. Report at II-11-12; Notes of staff conversation with ***, Sept. 30, 1993.

to over 100 percent value added.[41] There is unrefuted evidence, however, that much of the value added by processing stems from the additional materials being added to the slag, fines and off-specification material rather than from the processing of the products itself.[42] Thus, the actual value added by the *processing* activities is not significant. Finally, limited data on the record suggest that employment levels at processing operations are low in comparison with firms producing commodity and specialty grade ferrosilicon products.[43]

Based on the evidence of record, we find that processors of ferrosilicon are not members of the domestic industry producing ferrosilicon products. The value added by processing activities alone (exclusive of value added by addition of new materials to the processed product), employment levels, capital investment and technical expertise required to process ferrosilicon indicate that processing is not significant enough to constitute production of ferrosilicon.[44]

III. Condition of the Domestic Industry

In determining whether the domestic industry is materially injured by reason of the LTFV imports, the Commission considers all relevant economic factors which have a bearing on the state of the industry in the United States. These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, profits, cash flow, return on investment, ability to raise capital, and research and development. No single factor is determinative, and the Commission considers all relevant factors "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[45]

The demand for ferrosilicon is tied directly to the demand for steel and foundry industry products.[46] Weak demand from the construction, automotive, and appliance sectors contributed to a decline in output in the steel industry from 1990 to 1991. Technological advances in the composition and production processes of cast

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[41] *See* Report at II-12, based on interview with Egyptian respondents, and Petitioners' Posthearing Br., exhibit 6 at 7-8.

[42] Petitioners' Prehearing Br. at 7-8 and Posthearing Br., exhibit B at 2 and 5-7, and exhibit 6 at 6.

[43] One processor indicated that it employs on average between *** people. Staff conversation with ***, Sept. 30, 1993. Aggregate employment data of domestic firms producing commodity and specialty grade ferrosilicon products indicate that all firms have significantly higher employment levels. *See* Report at Table 9.

[44] Our decision also is supported by the fact that no party has urged the Commission to include processors in the domestic industry despite our specific requests that the parties consider the issue. Further, record evidence indicates that processors consider themselves to be members of the processing industry rather than the industry producing ferrosilicon. *See* Notes from staff conversation with ***, Sept. 30, 1993.

[45] 19 USC § 1677(7)(C)(iii).

[46] Report at II-6-7; EC-Q-107 at 8-9.

iron also have contributed to a decline in cast iron production by foundries.[47] Total U.S. consumption of ferrosilicon, measured in quantity, decreased by 6.2 percent from 1990 to 1992, falling 12.4 percent from 1990 to 1991, and increasing 7.2 percent from 1991 to 1992. Consumption was also 4.4 percent lower in January - June 1993 ("interim 1993") as compared with January - June 1992 ("interim 1992").[48] In terms of value, total U.S. consumption fell by 14.9 percent from 1990 to 1992, falling by 18.3 percent from 1990 to 1991, but rising by 4.1 percent from 1991 to 1992. Consumption in terms of value was 1.4 percent higher in interim 1993 as compared with interim 1992.[49]

Generally, indicators of the condition of the domestic industry have fallen, but tended to show some improvement toward the end of the period of investigation. U.S. production of ferrosilicon decreased by 23.4 percent from 1990 to 1992, falling by 17.1 percent from 1990 to 1991, and by 7.7 percent from 1991 to 1992. Production was 4.5 percent higher in interim 1993 compared with interim 1992.[50] Similarly, U.S. producers' total U.S. ferrosilicon shipments decreased by 24.1 percent from 1990 to 1992, falling by 10.3 percent from 1990 to 1991, and by 15.4 percent from 1991 to 1992. However, shipments were 11.9 percent larger in interim 1993 compared with interim 1992.[51] In terms of value, U.S. producers' domestic shipments decreased by 28.2 percent from 1990 to 1992, falling by 16.7 percent from 1990 to 1991, and by 13.8 percent from 1991 to 1992. The value of U.S. shipments was 15.0 percent higher in interim 1993 compared with interim 1992.[52]

Average U.S. capacity decreased from 283,303 silicon-content-short tons ("short tons") in 1990 to 275,498 short tons in 1991 and to 268,210 short-tons in 1992, for a decrease of 5.3 percent from 1990 to 1992.[53] Average U.S. capacity was slightly higher in interim 1993 compared with interim 1992. Average capacity utilization decreased from 78.3 percent in 1990 to 64.8 percent in 1991, and to 64.2 percent in 1992; it was 62.1 percent in interim 1992 compared with 64.5 percent in interim 1993.[54]

The number of production and related workers producing ferrosilicon decreased by 23.5 percent from 1990 to 1992, falling by 16.8 percent from 1990 to 1991, and by 8.1 percent from 1991 to 1992. The number of workers, however, was 10.9

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[47] *See Ferrosilicon from Brazil and Egypt*, Invs. Nos. 731-TA-641-642 (Preliminary), USITC Pub. 2605 (February 1993) at 11. Through improved design and metallurgical compositions, it is possible to produce much thinner and lighter castings with the same or even improved levels of performance. *Id.*

[48] Report at II-19 and Table C-1.

[49] Report at Table C-1.

[50] *Id.*

[51] *Id.*

[52] *Id.*

[53] *Id.*

[54] *Id.*

percent higher in interim 1993 compared with interim 1992. The number of hours worked by production and related workers producing ferrosilicon also declined by 28.9 percent from 1990 to 1992, falling by 27.6 percent from 1990 to 1991, and by 1.8 percent between 1991 and 1992. Total hours worked were 16.3 percent higher in interim 1993 when compared with interim 1992.[55] Hourly total compensation paid to U.S. producers' production and related workers increased from $16.93 in 1990 to $17.31 in 1991 and then increased further to $18.64 from 1991 to 1992. Hourly total compensation was $17.55 in interim 1992 as compared with $17.20 in interim 1993. Productivity of production and related workers increased by 4.4 percent from 1990 to 1992, first rising by 11.8 percent from 1990 to 1991, then falling by 6.6 percent from 1991 to 1992. Productivity was 10.0 percent lower in interim 1993 compared with interim 1992.[56]

Financial performance of domestic ferrosilicon producers declined from 1990 to 1992 but showed a slight improvement in interim 1993 when compared with interim 1992. Domestic producers had operating and net losses and negative cash flow throughout the period of investigation. Operating and net losses as a ratio to net sales increased in successive periods, but decreased somewhat in interim 1993 when compared with interim 1992.[57] The industry experienced increasingly large negative cash flow from 1990 through 1992. Cash flow improved somewhat in interim 1993 when compared with interim 1992.[58]

Net sales declined from 1990 to 1992, and by 1992 were approximately two-thirds of the 1990 level.[59] Unit values declined 3 to 4 percent annually, and net sales declined approximately 15 to 20 percent each year. The cost of goods sold ("COGS") by the domestic industry decreased by 29.1 percent from 1990 to 1992, falling by 17.1 percent from 1990 to 1991 and by 14.5 percent from 1991 to 1992. COGS were 8.3 percent higher when interim 1993 is compared with interim 1992.[60] Finally, total capital expenditures declined over the period, starting at $8.7 million in 1990, falling to $6.3 million in 1991, and falling further to $5.7 million in 1992. Capital expenditures increased somewhat in interim 1993 when compared with interim 1992.[61] [62]

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[55] *Id.*

[56] *Id.*

[57] Report at II-39.

[58] Report at Table 11.

[59] Report at II-39.

[60] Report at Table C-1.

[61] Report at II-45-46 and Table 15.

[62] Based on the declines in all indicators of the domestic industry's performance, including substantial declines in production, capacity utilization, employment, net sales, and a shift from net income to substantial net losses, Chairman Newquist and Commissioner Rohr find that the domestic ferrosilicon industry is experiencing material injury.

IV. Cumulation[63]

In General

In determining whether there is material injury by reason of the LTFV imports, the Commission is required to assess cumulatively the volume and effect of imports from two or more countries subject to investigation if such imports "compete with each other and with like products of the domestic industry in the United States market."[64] Cumulation is not required, however, when imports from a subject country are negligible and have no discernible adverse impact on the domestic industry.[65]

In assessing whether imports compete with each other and with the domestic like product, the Commission generally has considered four factors:

(1) the degree of fungibility between the imports from different countries and the domestic like product, including consideration of specific customer requirements and other quality related questions;
(2) the presence of sales or offers to sell in the same geographic markets of imports from different countries and the domestic like product;
(3) the existence of common or similar channels of distribution for imports from different countries and the domestic like product; and
(4) whether the imports are simultaneously present in the market.[66]

While no single factor is determinative, and the list of factors is not exclusive, these factors are intended to provide the Commission with a framework for determining whether the imports compete with each other and with the domestic like product.[67] Only a "reasonable overlap" of competition is required.[68] Further, the Commission generally has cumulated imports even where there were alleged differences in quality

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[63] Chairman Newquist does not join the remainder of the Views of the Commission. *See* Dissenting Views of Chairman Newquist.

[64] 19 USC § 1677(7)(C)(iv)(I); *Chaparral Steel Co. v. United States*, 901 F.2d 1097 (Fed. Cir. 1990).

[65] 19 USC § 1677(7)(C)(v).

[66] *See Cast Iron Pipe Fittings from Brazil, Korea and Taiwan*, Invs. Nos. 731-TA-278 through 280 (Final), USITC Pub. 1845 (May 1988), *aff'd, Fundicao Tupy S.A. v. United States*, 678 F. Supp. 898 (CIT 1988), *aff'd*, 859 F.2d 915 (Fed. Cir. 1988).

[67] *See e.g., Wieland Werke, AG v. United States*, 718 F. Supp. 50, 52 (CIT 1989).

[68] *See e.g., Granges Metallverken AB v. United States*, 716 F. Supp. 17 (CIT 1989).

between imports and domestic products, although considerations of quality differences are relevant to whether there is a "reasonable overlap" of competition.[69]

In addition to imports from Egypt, ferrosilicon imports from Brazil are currently subject to investigation.[70] Therefore, imports from these two countries must be cumulated for purposes of determining material injury to the domestic ferrosilicon industry if the other statutory requirements are met.[71]

1. *The Competition Requirement*

Petitioners argued that the Commission should cumulate imports from Egypt and Brazil based on a reasonable overlap of competition. They stated that the majority of imports from Egypt were of 65 percent and 75 percent ferrosilicon that compete with regular grade ferrosilicon produced domestically and imported from Brazil.[72] Further, they stated that slag and fines imported from Egypt compete with regular grade ferrosilicon. Petitioners asserted that imports of Egyptian ferrosilicon are present in the same geographic market as other ferrosilicon,[73] and that imports from Egypt are in the market simultaneously with domestic ferrosilicon and other imports.[74]

Egyptian respondents argued that their imports do not compete with either primary ferrosilicon products or with domestic waste and by-products. They stated that there was no reasonable overlap in competition with primary ferrosilicon products because Egyptian ferrosilicon is sold only to two processors that must add significant value to the material to enable it to be used by steel mills and iron foundries.[75] They also argued that a reasonable overlap of competition is not established based on their importation of 75 percent ferrosilicon because they made

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[69] *See e.g., Flat-Rolled Steel,* USITC Pub. 2664 at 26-27; *Certain Flat-Rolled Carbon Steel Products from Argentina, Australia, Austria, Belgium, Brazil, Canada, Finland, France, Germany, Italy, Japan, Korea, Mexico, the Netherlands, New Zealand, Poland, Romania, Spain, Sweden, Taiwan, and the United Kingdom,* Invs. Nos. 701-TA-319-354 and 731-TA-573-620 (Preliminary), USITC Pub. No. 2549 at 44-46 (August 1992); *Silicon Metal from the People's Republic of China,* Inv. No. 731-TA-472 (Final), USITC Pub. 2385 at 22-24 (June 1991).

[70] The Commission's preliminary investigations on Brazil and Egypt were instituted simultaneously and the Commission reached a preliminary determination of a reasonable indication of material injury on both countries on Feb. 26, 1993. The Commission has been required to make separate final determinations in these investigations as a result of the various postponements granted by Commerce of the Brazil determination.

[71] *See Ferrosilicon from Russia and Venezuela,* USITC Pub. 2650 (June 1993) at 14-15; *see also Cemex S.A. v. United States,* 790 F. Supp. 290 (CIT 1992).

[72] Petitioners' Posthearing Br. at 9.

[73] *Id.* at 10.

[74] *Id.*

[75] Egyptian respondents' Prehearing Br. at 5-7; *see also* Egyptian respondents' Posthearing Br. at 8-9.

only one very small shipment of this material over the entire period of investigation. Egyptian respondents argued that the domestic industry does not compete in the "niche" market filled by importers of Egyptian material because only a very small percentage of the domestic industry's production consists of waste and by-products sold to processors.[76] Finally, they argued that imports of Egyptian slag, fines and off-specification material are not interchangeable with domestic waste and by-products because Egyptian products have different chemical compositions and physical forms.[77]

Based on significant differences between the vast majority of imports from Egypt and imports from Brazil and the domestic like product, we find that the competition requirement for cumulation is not satisfied.[78] Data obtained in this final investigation indicate that imports of Egyptian product consisted largely of "off-specification" 65 percent ferrosilicon that had no direct counterpart among imports from Brazil or the domestic product. Further, the remainder of imports from Egypt consisted of slag and fines, while relatively little of the Brazilian and domestic product consisted of slag or fines.

a. Competition Between Imports from Egypt and Brazil

We first examined whether a reasonable overlap of competition existed between imports from Brazil and those from Egypt. During the entire period of investigation, 91.3 percent (141,243 short tons) of Brazilian exports consisted of 75 percent ferrosilicon whereas 8.7 percent (13,469 short tons) consisted of 50 percent ferrosilicon and slag.[79] [80] In contrast, 65.1 percent (4,227 short tons) of imports from

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[76] Egyptian respondents' Prehearing Br. at 8.

[77] *Id.* at 11-12; *see also* Egyptian respondents' Posthearing Br. at 4.

[78] Commissioner Rohr does not reach the question of competition among domestic and imported ferrosilicon products because he finds ferrosilicon imports from Egypt to be negligible. He does, however, join in the following discussion for purposes of his negligibility analysis to show that competition among the domestic products and imports is attenuated. *See* Commissioner Rohr's Additional Views.

[79] Official statistics of the U.S. Department of Commerce. Brazilian respondents claimed that they exported no 50 percent ferrosilicon to the United States during the period of investigation, thus implying that amount consisted entirely of slag imports. *See* Brazilian respondents' Posthearing Br., exhibit 3.

[80] Brazilian respondents argued that their slag imports were not covered by the scope of this investigation as determined by Commerce. *See* Brazilian respondents' Posthearing Br., Part II at 7 and exhibit 3. Commerce's preliminary determination of sales at less than fair value stated that it was "investigating whether sales of slag should be *excluded* from [its] fair value comparisons." (emphasis added). *See* 58 F.R. 43323 (Aug. 16, 1993). Based on the wording of Commerce's preliminary determination, Brazilian slag is "subject to investigation" by Commerce at the time of this determination. *Compare United Engineering & Forging v. United States*, 779 F. Supp. 1375, 1390 (1991).

Egypt consisted largely of 65 percent off-specification ferrosilicon,[81] whereas 34.9 percent (2,262 short tons) consisted of slag and fines.[82] [83] We analyzed competition between each type of product imported from Brazil and Egypt, as well as the product mix as a whole from each of the two countries.

Looking first at the largest subset of imports from Egypt, we find that there is not a reasonable overlap of competition between Egyptian off-specification 65 percent ferrosilicon and Brazilian 75 percent ferrosilicon. Although we recognize that there can be competition among the various grades and types of ferrosilicon,[84] Egyptian off-specification 65 percent ferrosilicon is different from Brazilian 75 percent ferrosilicon. The Egyptian product does not contain uniform 65 percent ferrosilicon, but is the combination of various off-specification materials combined to form a mixture that as a whole has a silicon content similar to commodity grade 65 percent ferrosilicon.[85] The Egyptian product is sold only to two U.S. processors who transform it into commercially viable products through blending with *** and other processing activities.[86]

Brazilian 75 percent ferrosilicon, by contrast, is sold directly to end-users in the steel and iron foundry industries.[87] There is no evidence on the record suggesting that Brazilian producers exported any commodity or off-specification 65 percent ferrosilicon to the United States during the period of investigation. Further, the processors purchasing off-specification Egyptian material do not purchase 75 percent ferrosilicon from Brazilian sources.[88] Thus, based on quality differences, different end-users, and the fact that purchasers of Egyptian 65 percent off-specification ferrosilicon do not purchase Brazilian 75 percent ferrosilicon, we find that there is not a reasonable overlap in competition between these imports.

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[81] Of the 65.1 percent of imports from Egypt consisting of high silicon content ferrosilicon, only *** metric tons consisted of 75 percent ferrosilicon. This amount constituted *** percent of all ferrosilicon imports from Egypt over the period of investigation. *See* Egyptian respondents' Prehearing Br. at 4; Tables based on Official Statistics of the U.S. Department of Commerce provided to the Commission on Oct. 14, 1993.

[82] Official Statistics of the U.S. Department of Commerce.

[83] Because official census data are collected on the basis of the chemical composition of the imported ferrosilicon rather than physical form, it is not possible to determine the percentage of imports consisting of fines from either Brazil or Egypt. Questionnaire data on the record show, however, that Brazilian producers did not export any fines, while the largest importer of Egyptian material states that *** percent of imports from Egypt consisted of fines. *See* Report at II-14.

[84] *See* footnote 18, *supra*.

[85] Report at II-14, n. 35, II-27 and II-74.

[86] Report at II-15, II-36 and II-74. Processed products containing ***.

[87] The Report shows that 82.7 percent of imports from Brazil go directly to end-users whereas *** percent of imports from Egypt go to *** processors. *See* Report at II-27.

[88] Report at II-27.

We also find that competition between Egyptian and Brazilian slag or waste products does not establish a reasonable overlap of competition between the imports from Egypt and Brazil as a whole. A maximum of 8.7 percent of all ferrosilicon imports from Brazil consisted of slag during the period of investigation whereas 34.9 percent of imports from Egypt consisted of slag.[89] While both Brazilian and Egyptian slag and waste products may be distributed through the same channels, the low percentage of slag and waste exports from Brazil relative to exports of 75 percent ferrosilicon indicates that there is not a reasonable overlap of competition based on these imports alone.[90]

Finally, we find that a reasonable overlap in competition cannot be established by comparing imports from Brazil and Egypt of 75 percent ferrosilicon. Whereas 91.3 percent of imports from Brazil consisted of 75 percent ferrosilicon, only *** percent of imports from Egypt consisted of comparable material. Additionally, the Egyptian 75 percent ferrosilicon and the Brazilian 75 percent ferrosilicon were sold to different end-users. Finally, record evidence shows that the Egyptian 75 percent ferrosilicon was imported only once during the period of investigation to fill "dead-weight" in a shipment of slag and off-specification material, thus calling into question whether these imports from Egypt and Brazil were simultaneously present in the market.[91] Moreover, this single shipment is not sufficient to constitute a reasonable overlap of competition.

Based on differences in the product mix of imports from Egypt and Brazil, the different channels of distribution of the majority of the imports, and the substantial quality differences between Brazilian commodity grade products and the majority of imports from Egypt, we do not find that there is a reasonable overlap of competition between imports from Brazil and those from Egypt. We therefore decline to cumulate imports from Egypt and Brazil in our analysis of material injury by reason of LTFV imports from Egypt.

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[89] We previously noted that some of this material could have consisted of 50 percent ferrosilicon, although the Brazilian respondents claim that they exported no 50 percent ferrosilicon during the period of investigation. Further, some of this material could have consisted of fines of a low silicon content. Imports from Egypt classified as slag may also contain some fines. *See* footnotes 91 and 95 *supra*. The fact that fines may be included within the percentages of slag imported from Egypt and Brazil does not alter our finding of no competition because of the overall low percentage of slag (and potentially fines) shipped by the Brazilian industry in comparison to imports from Egypt.

[90] We recognize that in terms of absolute volume, there were more slag imports from Brazil than from Egypt during the period of investigation. However, because our decision not to cumulate is based in part on the relative product mix of imports from the two countries, the percentages, rather than the absolute volumes, of imports weighed more heavily in our determination.

[91] Egyptian Prehearing Br. at 4, n. 7.

b. Competition Between Subject Imports and Domestic Like Products[92]

Having found no reasonable overlap of competition between imports from Egypt and Brazil, we need not determine whether imports from Egypt and Brazil are competitive with the domestic like product.[93] However, an analysis of competition between imports from Egypt and the domestic like product also shows that there is not a reasonable overlap of competition at this level.

First, as with Brazilian ferrosilicon, we find that there is not a sufficient overlap of competition between commodity and specialty grade ferrosilicon produced domestically and Egyptian off-specification 65 percent ferrosilicon imports. In 1992, 93.1 percent of domestic shipments of ferrosilicon consisted of commodity and specialty grade products.[94] Two domestic firms produced some commodity grade 65 percent ferrosilicon for a single end-user during the period of investigation.[95] In contrast, in 1992, *** percent of Egyptian shipments consisted of off-specification 65 percent.[96] As discussed above, imports of off-specification 65 percent ferrosilicon from Egypt are not competitive with the domestic commodity and specialty grade products because off-specification 65 percent ferrosilicon moves in different channels of distribution than domestic products[97] and because Egyptian ferrosilicon cannot be employed by end-users until undergoing processing. There is no information indicating that the processors purchasing Egyptian off-specification 65 percent ferrosilicon also purchase domestic 65 percent ferrosilicon or other commodity grade products or that *** of domestic 65 percent ferrosilicon purchased off-specification

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[92] Commissioner Nuzum does not join in this discussion. She finds that cumulation is not required based on the lack of sufficient competition between imports from Egypt and imports from Brazil.

[93] Under 19 USC § 1677(7)(C)(iv), the Commission must cumulate imports in determining injury to a domestic industry if it finds that imports subject to investigation compete with each other and the domestic like products.

[94] *See* Questionnaire Responses of the Domestic Industry.

[95] Report at Table 21 and Egyptian respondents' Prehearing Br. at 12. There is no information on the record suggesting that this single end-user has purchased off-specification 65 percent ferrosilicon from Egypt.

[96] 1992 is the only year for which the Commission received data on domestic shipments of slag, and we thus compared slag shipments from Egypt to domestic shipments during the same period. We note however, that over the entire period of investigation, *** percent of imports from Egypt consisted of off-specification 65 percent ferrosilicon. We also note the Egyptian respondents' one shipment of 75 percent ferrosilicon was imported in 1992, consisting of *** percent of their imports in that year, or *** percent of their total imports over the period of investigation. *See* Official Statistics of the United States Commerce Department.

[97] 88.8 percent of domestic shipments are made directly to end-users whereas *** percent of Egyptian products are shipped to processors. Report at II-27.

material from Egypt.[98] [99] Thus, based on quality differences, different end-users, and different channels of distribution between off-specification 65 percent ferrosilicon from Egypt and specialty and commodity grade products produced domestically, we find that there is not a reasonable overlap in competition between these imports and the domestic products.

Also similar to our finding on competition with Brazil, we find that competition between Egyptian and domestic slag or waste products does not establish a reasonable overlap of competition between the imports from Egypt and the domestic like product as a whole. In 1992, only *** percent of all domestically produced ferrosilicon consisted of slag, whereas *** percent of imports from Egypt consisted of slag during the same period.[100] While both domestic and Egyptian slag and waste products may be distributed through the same channels, the low percent of shipments of domestic slag and waste products relative to shipments of commodity and specialty grade products indicates that there is not a reasonable overlap of competition based on these imports alone. Additionally, record evidence shows that slag produced domestically are superior in quality to Egyptian slag because Egyptian slag contain a higher degree of aluminum than domestic slag, thereby limiting interchangeability between the two types of slag.[101] Thus, a reasonable overlap of competition cannot be established by comparing domestic and Egyptian slag products.

Finally, as with Brazil, we find that a reasonable overlap in competition cannot be established by comparing imports from Egypt of 75 percent ferrosilicon to domestically produced 75 percent ferrosilicon. Whereas 93.1 percent of domestic products consisted of commodity or specialty grade products in 1992, only *** of imports from Egypt consisted of comparable material in the same period. Also as discussed above, the Egyptian material moved in different channels of distribution and was not necessarily simultaneously present in the market with domestic material. Furthermore, this single shipment is not sufficient to constitute a reasonable overlap of competition.

For the reasons discussed above, Vice Chairman Watson, Commissioner Brunsdale, Commissioner Crawford and Commission Nuzum decline to cumulate

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[98] Report at II-27.

[99] Even assuming petitioners' arguments are correct that off-specification 65 percent ferrosilicon is not significantly different from commodity grade 65 percent ferrosilicon in terms of ASTM standards, this would not change our finding that off-specification 65 percent Egyptian ferrosilicon does not compete with domestic 65 percent ferrosilicon because the two products move in different channels of distribution and the Egyptian product cannot be used prior to processing. *See* Petitioners' Posthearing Br. at 3-4 and exhibit 4.

[100] The fact that fines may be included within the percentages of slag imported from Egypt and shipped domestically would not change this conclusion because of the overall low amount of slag (and potentially fines) shipped by the domestic industry in comparison to imports from Egypt. Additionally, there is information on the record suggesting that Egyptian fines are much smaller than domestic fines and are therefore not interchangeable with them. *See* Egyptian respondents' Prehearing Br. at 12.

[101] *See* Egyptian respondents' Prehearing Br. at 12, and Posthearing Br. at 3.

imports from Egypt with imports from Brazil for the purposes of determining material injury by reason of less than fair value ferrosilicon imports from Egypt.

V. No Material Injury by Reason of LTFV Imports

In its determination of whether the domestic injury is materially injured by reason of the subject imports, the statute directs the Commission to consider:[102]

(I) the volume of imports of the merchandise which is the subject of the investigation;
(II) the effect of imports of that merchandise on prices in the United States for like products; and
(III) the impact of imports of such merchandise on domestic producers of like products, but only in the context of production operations in the United States.

In making this determination, the Commission may consider "such other economic factors as are relevant to the determination. . ."[103] However, the Commission is not to weigh causes.[104] [105] [106] [107] Finally, the Commission is directed to "evaluate

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[102] *See* 19 USC § 1677(7)(B).

[103] 19 USC § 1677(7)(B)(ii).

[104] *See e.g., Citrosuco Paulista, S.A. v. United States*, 704 F. Supp. 1075, 1101 (CIT 1988).

[105] Commissioner Rohr, and Commissioner Nuzum note that the Commission need not determine that imports are "the principal, a substantial or a significant cause of material injury." S. Rep. No. 249, 96th Cong., 1st Sess. 57 and 74 (1979). Rather, a finding that imports are a cause of material injury is sufficient. *See e.g., Metallverken Nederland, B.V. v. United States*, 728 F. Supp. 730, 741 (CIT 1989); *Citrosuco Paulista S.A. v. United States*, 704 F. Supp. 1075, 1101 (CIT 1988).

[106] Vice Chairman Watson notes that the courts have interpreted the statutory requirement that the Commission consider whether there is material injury "by reason of" the subject imports in a number of different ways. *Compare, e.g., United Engineering & Forging v. United States*, 779 F. Supp. 1375, 1391 (CIT 1989)("rather it must determine whether unfairly-traded imports are contributing to such injury to the domestic industry. Such imports, therefore, need not be the only cause of harm to the domestic industry" (citations omitted)); *Metallverken Nederland B.V. v. United States*, 728 F. Supp. 730, 741 (CIT 1989)(affirming a determination by two Commissioners that "the imports were a cause of material injury"); *USX Corporation v. United States*, 682 F. Supp. 60, 67 (CIT 1988)("any causation analysis must have at its core, the issue of whether the imports at issue cause, in a non *de minimis* manner, the material injury to the industry . . .").

Accordingly, Vice Chairman Watson has decided to adhere to the standard provisions, which state that the Commission must satisfy itself that, in light of all the information presented, there is a "sufficient causal link between the less-than-fair-value imports and the requisite injury." S. Rep. No. 249, 96th Cong., 1st Sess. 75 (1979).

all relevant factors . . . within the context of the . . . conditions of competition that are distinctive to the affected industry."[108]

A. Volume of Imports

We do not find the volume of imports from Egypt to be significant. There were only three shipments of Egyptian ferrosilicon in the 18 quarters during the preliminary and final periods of investigation.[109] While the level of imports increased somewhat before dropping to zero in interim 1993, the overall level of imports from Egypt was very low both in terms of absolute volume and as a percent of U.S. apparent domestic consumption throughout the period of investigation.[110] [111] We are cognizant that domestic producers' share of apparent domestic consumption fell over the period examined.[112] However, imports from Egypt cannot be viewed as contributing to that decline in light of their low level and the extremely attenuated nature of competition between them and domestic ferrosilicon products, as discussed above. We thus find that the volume of imports from Egypt was not significant.

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[107] (...continued)

[107] Commissioners Brunsdale and Crawford note that the statute requires that the Commission determine whether a domestic industry is "materially injured by reason of" the LTFV imports. They find that the clear meaning of the statute is to require a determination on whether the domestic industry is materially injured by reason of LTFV imports, not by reason of LTFV imports among other things. Many, if not most, domestic industries are subject to injury from more than one economic factor. Of these factors, there may be more than one that independently is causing material injury to the domestic industry. It is assumed in the legislative history that the 'ITC will consider information which indicates that harm is caused by factors other than the less-than-fair-value imports." S. Rep. No. 249 at 75. However, the legislative history makes it clear that the Commission is not to weigh or prioritize the factors that are independently causing material injury. *Id.* at 74; H.R. Rep. No. 317 at 47. The Commission is not to determine if the LTFV imports are "the principal, a substantial or a significant cause of material injury." S. Rep. No. 249 at 74. Rather it is to determine whether any injury "by reason of" the LTFV imports is material. That is, the Commission must determine if *the subject imports* are causing material injury to the domestic industry. "When determining the effect of imports on the domestic industry, the Commission must consider all relevant factors that can demonstrate if *unfairly traded imports are materially injuring the domestic industry*." S. Rep. No. 71, 100th Cong., 1st Sess. 116 (1987) (emphasis added).

[108] 19 U.S.C. § 1677(7)(C).

[109] Shipments occurred in 1990 and 1992. Report at II-55-56. The volume of shipments was 2,085 short tons in 1990 and 4,292 short tons in 1992. The market share held by imports from Egypt was 0.6 percent in 1990 and 1.3 percent in 1992. *See* Official Statistics of the U.S. Department of Commerce.

[110] Report at Table 19 and Table 20.

[111] Indeed, Commissioner Rohr found imports from Egypt to be negligible.

[112] Report at Table 20.

B. Price Effects

In evaluating the effect of LTFV imports on prices, the Commission considers whether "there has been significant price underselling by the imported merchandise as compared with prices of like products of the United States," and whether "the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree."[113] In this investigation, pricing data on the domestic industry show that domestic prices declined during the period of investigation.[114] One of the factors relevant to a determination of whether there has been significant underselling or significant price depression by imports from Egypt is the degree of substitutability between domestic ferrosilicon products and imports from Egypt. The more substitutable the products are, the more likely that potential purchasers will make their purchasing decisions based on price differences between the products.

As discussed above concerning cumulation of imports from Egypt and Brazil, the vast majority of imports from Egypt consists of ferrosilicon by-products, waste and off-specification material that require processing before being sold to ferrosilicon consumers. In contrast, the overwhelming majority of domestic ferrosilicon products consists of commodity and specialty grade ferrosilicon sold directly to end-users in the steel and iron foundry industries. As a result, there is very limited substitutability between the Egyptian products and the vast majority of ferrosilicon products produced by the domestic industry. Based on this fact, and because the overall volume and market share of imports from Egypt was very small, we find that the imports from Egypt have had no significant price depressing effect on domestic prices. The single shipment of Egyptian 75 percent ferrosilicon that may be more directly substitutable with domestic 75 percent ferrosilicon was too small to have any price effect in and of itself.

We also find that there has been no significant underselling by imports from Egypt. Record evidence does show that the small lot of 75 percent ferrosilicon imported from Egypt was priced below the comparable domestic product by *** percent. In addition, off-specification 65 percent ferrosilicon from Egypt was priced below domestic commodity grade ferrosilicon in all instances, by an average of ***

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[113] 19 U.S.C §1677(7)(C)(ii).

[114] Domestic prices fluctuated but generally declined during the period of investigation. For instance, domestic prices for 75 percent ferrosilicon sold to steel mills were *** percent lower in the second quarter of 1993 than they were in the first quarter of 1990. *See* Report at II-63. Similarly, prices for 50 percent ferrosilicon sold to steel producers were *** percent lower in the second quarter of 1993 than they were in the first quarter of 1990. Prices for U.S.-produced 50 percent ferrosilicon sold to iron foundries also fluctuated downward during the investigation period, falling by *** percent over the period of investigation. Limited pricing data for U.S.-produced 65 percent ferrosilicon sold to steel producers similarly showed prices fluctuating downwards over the period of investigation, falling by *** percent overall. *See* Report at II-63.

percent.[115] However, the prices for Egyptian products set forth above were prices to processors, whereas the prices for domestic products were prices to end-users.[116] Because the sales prices of Egyptian product and domestic product are for sales at different levels of trade, comparing the two is not an accurate indicator of significant underselling.[117] Moreover, one would expect a product requiring further processing, like the majority of Egyptian products, to be sold for lower prices than a product that does not require such processing, like the majority of domestic products. Egyptian off-specification 65 percent ferrosilicon is also inferior in quality to domestic commodity grade 65 percent ferrosilicon, which further diminishes the significance of the lower prices charged for the Egyptian products.

We also find no significant underselling or price depressing effects when assessing price effects of imports from Egypt on domestic ferrosilicon waste and by-products. Production of domestic waste and by-products is ancillary to primary ferrosilicon production rather than deliberate. Further, the domestic industry reuses waste and by-products to some extent, and ships only a small amount of its total production in the form of these products.[118] Thus, even if Egyptian products are priced below comparable domestic products, their price effect on the domestic industry producing ferrosilicon is not significant.

C. Impact on the Domestic Industry

The vast majority of imports from Egypt compete directly only with the domestic industry's production of waste and by-products. This competition is too minimal to have any impact on the domestic industry, which ships only *** percent of its production in the form of these products. Further, this competition has no direct impact on the primary output of the domestic industry because waste and by-products are produced in the course of primary production. We also find that Egyptian importers' small shipment of 75 percent ferrosilicon, alone or considered together with shipments of off-specification products, is too small to have had any impact on the domestic industry. In sum, the insignificant volume and price effects of the imports indicate a lack of a sufficient impact on the domestic industry to warrant an affirmative determination.[119]

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[115] Report at II-71.

[116] Report at II-71.

[117] *Compare Keyes Fibre Company v. United States*, 682 F. Supp. 583 (CIT 1988) (holding that the Commission must compare the prices of subject imports and the domestic like product at the same point in the channels of distribution of the merchandise).

[118] Report at II-27; Egyptian respondents' Prehearing Br. at 8-11.

[119] Commissioner Brunsdale and Commissioner Crawford note that the Department of Commerce's dumping margin on Egyptian ferrosilicon was 90.50 percent. (Report at II-15) Given the size of the margin, it may be true that no Egyptian ferrosilicon would be sold in the U.S. market if it were fairly priced. However, even assuming, for the sake of analysis, that

(continued...)

D. Conclusion

Based on the foregoing, we find that the domestic industry producing ferrosilicon is not materially injured by reason of LTFV imports of ferrosilicon from Egypt.

VI. Threat of Material Injury

A. General Legal Considerations

The statute specifies ten factors that we must consider in making threat determinations.[120] It further states that any affirmative threat determination "shall be made on the basis of evidence that the threat of material injury is real and that actual injury is imminent." The Commission's determination "may not be made on the basis of mere conjecture or supposition."[121]

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[119] (...continued)
this is true, the resulting injury to the domestic industry would not rise to the level of material. As discussed above, the market share of the imports from Egypt was extremely small throughout the period of investigation. Furthermore, there is virtually no substitutability between the Egyptian imports and the vast majority of the product produced by the domestic industry, which means that any effect of the subject imports would be through the effect on the prices the domestic industry receives for its slag and fines. Commissioners Brunsdale and Crawford find that any such effect is not sufficient to demonstrate material injury.

[120] 19 USC § 1677(7)(F)(i). The Commission must also consider dumping findings or antidumping remedies in markets of foreign countries against the same class or kind of merchandise suggest a threat of material injury to the domestic industry. 19 USC § 1677(7)(F)(iii)(I). Because these investigations concern neither subsidy allegations nor agricultural products, the first and ninth statutory threat factors are not applicable here and will not be discussed further.

[121] 19 USC § 1677(7)(F)(ii).

B. No Threat of Material Injury by Reason of LTFV Imports from Egypt

We have not cumulated imports from Egypt with imports from Brazil for our threat analysis.[122] [123] We find no threat of material injury by reason of imports from Egypt based on the following factors.

The Egyptian ferrosilicon industry has no unutilized capacity and there is no evidence of any capacity increases during the period of investigation in this final investigation.[124] Egyptian production capacity remained stable from 1990 through 1993, and is not projected to rise through 1994. Capacity utilization rose from 1991 through interim 1993 and was at *** percent in the latter period. It is projected to remain at this level through 1994.[125] Further, the most recent data on capacity utilization show that there is no existing unused capacity that could result in a significant increase in U.S. imports of Egyptian merchandise.

Egyptian products were exported to the United States only in 1990 and 1992; there were no exports to the United States in 1991 or interim 1993.[126] While the market share and volume of Egyptian products rose in 1992 compared with 1990, the level of imports was low overall.[127] [128] There is no evidence on the record suggesting that the volume or share of Egyptian product are likely to rise to injurious

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[122] Cumulation for threat analysis is discretionary if the imports are subject to investigation and compete with each other and the like products of the domestic industry. *See* 19 USC § 1677(7)(F)(iv). Vice Chairman Watson, Commissioner Brunsdale, Commissioner Crawford and Commission Nuzum found that the standards for mandatory cumulation are not met because Egyptian products do not compete with imports from Brazil and domestic products and therefore do not reach the issue of cumulation for purposes of their threat analysis.

[123] Commissioner Rohr finds that imports from Egypt to be negligible and declines to cumulate imports from Brazil and Egypt in his threat analyses based on their negligibility, attenuated competition between imports and the domestic like product, and differing trends between the imports from Brazil and Egypt. *See Torrington Co. v. United States*, 790 F. Supp. 1161, 1172 (CIT 1992); *Coated Groundwood Paper from Austria, Belgium, Finland, France, Germany, Italy, the Netherlands, Sweden, and the United Kingdom*, Invs. Nos. 731-TA-486-494 (Preliminary), USITC Pub. 2359 at 44 (February 1991).

[124] We note that the record in the preliminary investigation shows an ***. *See Ferrosilicon from Egypt*, Invs. Nos. 731-TA-641 and 642 (Preliminary), USITC Pub. 2605 (February 1993) at I-40, Table 18. Capacity and capacity utilization rates reflect EFACO's addition of a fourth furnace in the first quarter of 1990 which accounted for a *** percent increase in production capacity over capacity reported during the preliminary investigation. Report at Table 18. Petitioners' assertions that EFACO is also planning to add a fifth furnace appear to be based on one trade press report and are not supported by any other evidence on the record. *See* Petitioners' Prehearing Br. at 47.

[125] Report at II-51-52.

[126] Report at Table 18.

[127] *Compare* Report Tables 19 and 20.

[128] Commissioner Rohr found imports from Egypt to be negligible.

levels. Further, given the fact that imports from Egypt are poor substitutes for, and do not compete to any significant degree with, the domestic like product, we find no likelihood that imports of the merchandise will enter the United States at prices that will have a depressing or suppressing effect on domestic prices.[129]

There has also been no substantial increase in the inventories of Egyptian merchandise in the United States. In fact, with the exception of a small amount of inventories held in 1992, there have been no inventories of Egyptian material in the United States during the period of investigation.[130]

We note that the sole Egyptian producer exporting to the United States during the period of investigation entered into a price undertaking with the European Community ("EC") following initiation of an antidumping investigation on ferrosilicon in the EC in 1991.[131] However, given the fact that the principal export markets for Egyptian ferrosilicon are Europe, the Middle East and the Far East, and that Egyptian exports to the United States have not increased since initiation of the EC antidumping investigation, this factor also does not support a finding of threat of material injury to the domestic industry.

There is no evidence on the record showing any realistic potential for product shifting in Egypt, nor is there any indication of other demonstrable adverse trends that constitute evidence that any threat of material injury is real or that actual injury to the domestic ferrosilicon industry is imminent. Finally, because competition between the majority of Egyptian products exported to the United States and the domestic like product is extremely attenuated, we find no evidence of actual or potential negative effects on the existing development and production efforts of the domestic industry.

C. Conclusion

Based on the foregoing analysis, we find that the domestic ferrosilicon industry is not threatened with material injury by reason of the LTFV imports of ferrosilicon from Egypt.

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[129] 19 USC § 1677(7)(F)(iv).

[130] Report at Table 16.

[131] Report at II-52; *see also* Council Regulation 3642/92, 1992 O.J. (L 369). The EC imposed definitive antidumping duties of 32 percent on the other Egyptian ferrosilicon producer as a result of its antidumping investigation.

ADDITIONAL VIEWS OF COMMISSIONER ROHR

My colleagues have chosen to first address the issue of whether the subject imports from Egypt should be cumulated with other subject imports based on competition with other subject imports and the domestic like product before addressing the negligible imports exception. I find that it is appropriate to first address whether the imports subject to investigation from any individual country are negligible. I do not disagree with my colleagues finding that competition among the imports subject to investigation and the domestic like product is very limited due to the nature of the subject imports from Egypt. Indeed, as discussed below, this finding supports my own conclusion that the subject imports from Egypt are negligible. Nevertheless, I believe that first addressing the statutorily provided exception to cumulation, namely negligibility, provides a better basis for approaching the issue of cumulation. This approach avoids the possibility that an overlap of competition might be based on imports that would be excluded from cumulation on negligibility grounds.[1]

Negligible Imports Exception

In determining whether imports are negligible, the Commission is required to consider all relevant economic factors including whether:

(I) the volume and market share of the imports are negligible;
(II) sales transactions involving the imports are isolated and sporadic; and
(III) the domestic market for the like product is price sensitive by reason of the nature of the product, so that a small quantity of imports can result in price suppression or depression.[2]

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[1] *See Certain Flat-Rolled Carbon Steel Products from Argentina, Australia, Austria, Belgium, Brazil, Canada, Finland, France, Germany, Italy, Japan, Korea, Mexico, the Netherlands, New Zealand, Poland, Romania, Spain, Sweden, and the United Kingdom,* Invs. Nos. 701-TA-319-332, 334, 336-342, 344 and 347-353 (Final) and 731-TA-573-579, 581-592, 594-597, 599-609, and 612-619 (Final), USITC Pub. No. 2664, Vol. 1, at 24, footnote 102.

[2] 19 U.S.C. § 1677(7)(C)(V). I note that both the House Ways and Means Committee Report and the Conference Committee Report stress that the Commission is to apply the exception sparingly and that it is not to be used to subvert the purpose and general application of the mandatory cumulation provision of the statute. *See* H.R. Rep. No. 40, Part 1, 100th Cong., 1st Sess. 130 at 131 (1987); H.R. Rep. No. 576, 100th Cong., 2d Sess. at 621. I note further that the House Ways and Means Committee Report emphasizes that whether imports are "negligible" may differ from industry to industry and for that reason the statute does not provide a specific numeric definition of negligibility. H.R. Rep. No. 40, Part 1, 100th Cong., 1st. Sess. 130 at 131 (1987). In addition, I note that the legislative history indicates this exception should be applied with "particular care in situations involving fungible products, where a small quantity of low-priced imports can have a very real effect on the market." *Id.; see also* H.R. Rep. 576, 100th Cong., 2d Sess. at 621 (April 20, 1988).

In addition to the three enumerated statutory factors, the Commission has in the past considered additional factors, for example: whether imports have been increasing;[3] whether the domestic industry is "already suffering considerable injury and has long been battered by import price competition";[4] trends in market penetration; the degree of competition between the imported product and the domestic product; and any relationships of foreign producers to one another and to common importers.[5]

In these investigations, petitioners argued that imports from Egypt were not negligible because they were at volumes higher than the Commission has in the past considered negligible. They also argued that the sales transactions involving imports from Egypt were not isolated and sporadic because the processors "trickle sell" processed Egyptian material over a long period of time. Finally, they stated that because the domestic market for ferrosilicon is price sensitive, even a small quantity of imports can have an adverse impact on the domestic industry.[6]

Egyptian respondents argued that their imports are negligible because the imports have been at very low levels over the period of investigation. They urged the Commission to focus on the sales of their imports to processors rather than the processors' later sales to end-users in determining whether the sales transactions involving their imports are isolated and sporadic, stating that they had imports and sales to processors in only 3 of the 18 quarters encompassing the preliminary and final periods of investigation.[7] They also argued that their imports have had no discernible adverse impact on the domestic industry because they are noncompetitive.[8]

I find that imports from Egypt were negligible during the period of investigation. There were no imports from Egypt in 1991 or interim 1993, and imports were made in only 3 of the 18 quarters under investigation.[9] The share of apparent domestic consumption held by these imports was 0.6 percent in 1990, and at

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[3] *See Coated Groundwood Paper from Austria, Belgium, Finland, France, Germany, Italy, the Netherlands, Sweden, and the United Kingdom*, Invs. Nos. 731-TA-486 through 494 (Preliminary), USITC Pub. 2359 (February 1991) at 31.

[4] H.R. Rep. No. 40, Part 1, 100th Cong., 1st Sess. 130 at 131 (1987).

[5] *See e.g., Certain Flat-Rolled Carbon Steel Products from Argentina, Australia, Austria, Belgium, Brazil, Canada, Finland, France, Germany, Italy, Japan, Korea, Mexico, the Netherlands, New Zealand, Poland, Romania, Spain, Sweden, and the United Kingdom*, USITC Pub. 2664 (August 1993) at 31 ("Where import penetration has increased even by small amounts, we have looked more carefully at the existence of a discernible adverse impact. . . In deciding whether imports from a particular country are negligible, we also considered the extent of direct competition between the particular imports and the domestic industry. . . We looked at the substitutability between imports and the domestic products in terms of any quality or technical differences. . ."); *Certain Stainless Steel Butt-Weld Pipe Fittings from Korea and Taiwan*, Invs. Nos. 731-TA-563 and 564 (Preliminary), USITC Pub. 2534 (July 1992) at 16, n. 61.

[6] Petitioners' Prehearing Br. at 27-28.

[7] Egyptian respondents' Posthearing Br. at 11, n. 46.

[8] Egyptian respondents Prehearing Br. at 20-25.

[9] Report at II-55 and II-58.

their peak were only 1.3 percent of consumption in 1992. The volume of imports remained very small at 2,085 short tons in 1990 and 4,292 short tons in 1992.[10]

In addition to this low market share and volume of imports, I find it significant that competition among the domestic product and Egyptian and Brazilian imports is attenuated based on the significant differences in the subject imports from Egypt and the domestic like product. As detailed in the main body of this opinion[11], all but one small shipment of the subject imports of ferrosilicon from Egypt are waste and off-specification that require further processing before being sold to ferrosilicon consumers. In contrast, the vast majority of domestic ferrosilicon is commodity and specialty grade sold directly to end-users in the iron foundry and steel industries. Furthermore sales of Egyptian material are made on a spot market basis, in contrast to most domestic ferrosilicon, which is sold on a contract basis.[12] Therefore, imports of ferrosilicon from Egypt only compete with a very small segment of U.S.-produced ferrosilicon.

I find that it is appropriate to examine the sale from the importer to the processor in determining whether the "sales transactions" involving Egyptian imports were isolated and sporadic. Even though the processing of the imported Egyptian ferrosilicon is not complex, it does add significant value to the subject imports from Egypt ***. After considering the extent and value of processing required before Egyptian imports can be sold to end-users in the U.S. market, I find that sales to processors, rather than later sales of processed material by the processors, are the most direct point of competition involving the imports themselves.[13] Sales of comparable U.S.-produced ferrosilicon to these processors accounts for only a very minor share of U.S. production of ferrosilicon. Also keeping in mind the infrequency of shipments of the subject imports from Egypt, I find that imports from Egypt were isolated and sporadic.

As I have in recent investigations on ferrosilicon, I recognize that the domestic market for ferrosilicon is fairly price sensitive, and that the domestic industry is under severe stress. However, I find that the imports from Egypt had no discernible adverse impact on the domestic industry based on their overall low level, their isolated and sporadic nature and the fact that competition between Egyptian ferrosilicon products of the domestic industry is very limited. Because I find these imports to be negligible within the meaning of the statute, I do not cumulate the subject ferrosilicon imports from Egypt with any other imports subject to investigation for purposes of determining whether the material injury being suffered by the domestic ferrosilicon industry is by reason of these imports.

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[10] Report at Table 20.

[11] *See* discussion *supra* in the Cumulation section.

[12] Notes of staff conversations with ***, Sept. 30, 1993, Report at II-58.

[13] Indeed, to the extent that the imports are ***.

DISSENTING VIEWS OF CHAIRMAN NEWQUIST

Unlike my colleagues, I find that the domestic industry producing ferrosilicon is materially injured by reason of imports of this product from Egypt which the Department of Commerce has found to be sold in the United States at less than fair value.

In recent months, the Commission has conducted no fewer than five final investigations concerning imports of ferrosilicon -- each resulting in an affirmative determination.[1] In this investigation, there are few, if any, issues which have not already been addressed in those earlier affirmative investigations. This is not, in my view, a difficult determination to make.

I concur in the majority's discussion of like product, domestic industry, and condition of the domestic industry. Thus I begin my dissent by addressing the issue of cumulation.

I. Cumulation

It is at this critical juncture -- the question of whether to cumulate imports from Egypt with those from Brazil -- that I disagree with my colleagues.[2] Simply, I find that ferrosilicon from Egypt competes with both ferrosilicon from Brazil and the domestic like product, and that imports from Egypt are not "negligible."

The cumulation provision provides, in pertinent part, that:

> the Commission shall cumulatively assess the volume and effect of imports from two or more countries of like products subject to investigation if such imports compete with each other and with the like products of the domestic industry *in the United States market*.[3]

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[1] *Ferrosilicon from the People's Republic of China*, Inv. No. 731-TA-567 (Final), USITC Pub. 2606 (March 1993); *Ferrosilicon from Kazakhstan and Ukraine*, Invs. Nos. 731-TA-566 and 569 (Final), USITC Pub. 2616 (March 1993); *Ferrosilicon from Russia and Venezuela*, Invs. Nos. 303-TA-23, 731-TA-568 and 570 (Final), USITC Pub. 2650 (June 1993).

[2] As procedural background, on Jan. 12, 1993, five domestic producers of ferrosilicon and three associated unions filed a single petition with the Commission and the Department of Commerce alleging that the domestic ferrosilicon industry was materially injured, or threatened with material injury, by reason of less than fair value imports of ferrosilicon from Egypt and Brazil. The Commission instituted preliminary investigations and, in February 1993, found a reasonable indication of material injury by reason of imports from Egypt and Brazil. In the preliminary investigation, the Commission cumulated imports from Brazil and Egypt. The Department of Commerce subsequently made preliminary dumping margin calculations for imports from both countries, as well as a final calculation for imports from Egypt. Commerce, however, postponed its final determination for imports from Brazil until Dec. 27, 1993.

[3] The Commission typically applies a four factor "competition for cumulation" test:

(1) the degree of fungibility between the imports from different countries and between imports and the domestic like product, including consideration of specific customer

(continued...)

* * *

> The Commission is not required to [cumulate] . . . in any case in which the Commission determines that imports of merchandise subject to investigation are negligible and without discernable [sic] adverse impact on the domestic industry.[4]

19 U.S.C. §§ 1677(7)(C)(iv)(I)(emphasis added), 1677(7)(C)(v).

As I explained in the recent *Flat-Rolled Carbon Steel* investigations,[5] I view the cumulation provision in the statute to require scrutiny of primarily geographic and temporal competition between the subject imports themselves and the domestic like product; the assessment of the extent of competition on the basis of the substitutability of these products is a lesser consideration. Nowhere does the cumulation provision state that competition is a function of interchangeability based upon the imported and domestic products' characteristics and uses. Instead, such competition is appropriately addressed in the like product analysis. In my view, once a like product determination is made, that determination establishes an inherent level of fungibility within that like product. Only in exceptional circumstances could I anticipate finding products to be "like," and then turn around and find that, for purposes of cumulation, they do not "compete" because they are not sufficiently fungible and thus there is "no reasonable overlap" based on some roving standard of substitutability.[6]

To the contrary, in my view, the question of fungibility is more relevant to the assessment of whether imports are "negligible"; in that analysis, the fungibility within

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[3] (...continued)
requirements and other quality related questions;
(2) the presence of sales or offers to sell in the same geographic markets of imports from different countries and the domestic like product;
(3) the existence of common or similar channels of distribution for imports from different countries and the domestic like product; and
(4) whether the imports are simultaneously present in the market.

See, e.g., Certain Cast Iron Pipe Fittings from Brazil, Korea, and Taiwan, Invs. Nos. 731-TA-278-280 (Final), USITC Pub. 1845 (May 1986), *aff'd, Fundicao Tupy, S.A. v. United States,* 678 F. Supp. 898, 902 (Ct. Int'l Trade 1988), *aff'd,* 859 F.2d 915 (Fed. Cir. 1988).

[4] In assessing negligibility, the Commission is directed to evaluate: (i) the volume and market share of subject imports from any one country; (ii) the frequency of sales transactions of imports from any one country; and (iii) the price sensitivity of the domestic market. 19 U.S.C. § 1677(7)(C)(v).

[5] USITC Pub. 2664 (August 1993).

[6] *See* 19 U.S.C. § 1677(10). It should be noted that the Commission generally has cumulated imports even where there were alleged differences in quality between imports and domestic products. *See, e.g., Silicon Metal from the People's Republic of China,* Inv. No. 731-TA-472 (Final), USITC Pub. 2385 at 22-24 (June 1991). Commission cumulated allegedly inferior imports from China with those from Brazil and Argentina.

any like product can be relevant in determining what level of imports may or may not have a discernible adverse effect on the industry producing the like product.

A. Reasonable Overlap Of Competition

Contrary to the Egyptian respondents' assertions, I find that there is a reasonable overlap of competition between imports of ferrosilicon from Egypt, imports from Brazil, and the domestic like product. Ferrosilicon from Egypt was imported and sold in the U.S. market during at least three quarters between 1990-92.[7] Imports and sales of ferrosilicon from Brazil occurred throughout the period of investigation.[8] Domestic ferrosilicon as well was sold in the U.S. market during all quarters of the period of investigation.[9] Thus I find there to be a sufficient overlap of geographic and temporal competition between the imports themselves and the domestic like product.

Moreover, although virtually all ferrosilicon from Egypt is sold to unrelated distributors, and most domestic and Brazilian ferrosilicon sold to unrelated end users, there is, nonetheless, a consequential overlap of competition between all three at the customer level.[10]

In addition to asserting that slag and off-specification material -- the majority of their exports -- are a separate like product,[11] the Egyptian respondents argue that slag and off-specification ferrosilicon do not compete with imports of ferrosilicon from Brazil or the domestic product.[12] The record, however, demonstrates otherwise. First, both Brazilian and domestic producers report selling varying amounts of slag in the domestic market;[13] therefore, there is some direct competition between slag from Egypt, Brazil and the U.S. More importantly, second, assuming *arguendo* that Egyptian slag, as imported, does not compete directly with Brazilian and domestic ferrosilicon 50, 65 or 75, after further refinement by processors, the Egyptian product

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[7] Report at Tables 2, 19. Although definitive information is lacking, it is likely that domestic *shipments* of ferrosilicon from Egypt occurred during more than three quarters. Ferrosilicon from Egypt is imported and sold to processors who, in turn, further refine the ferrosilicon and enter it into the stream of commerce. Thus, any single importation of ferrosilicon from Egypt may be systematically released into the marketplace over time.

[8] *Id.*

[9] Report at Table 21.

[10] Report at II-27; Figures 5 and 6.

[11] The Commission unanimously rejected respondents' argument that slag and off-specification material are a like product separate from other ferrosilicon. *See* Majority determination at "Like Product."

[12] As noted above, in my analytical framework, such fungibility arguments are more appropriately a negligibility issue rather than a reasonable overlap of competition issue. Since, however, the Egyptian respondents raise fungibility as part of their competition arguments, I will so address it here.

[13] Report at II-22, n. 51, n. 52; Importers' Questionnaires.

is released into the market and vies for consumption with both the Brazilian and domestic like product.[14]

For the foregoing reasons, I find that there is a reasonable overlap of competition between imports from Egypt and Brazil and the domestic like product.

B. Negligibility

Again, contrary to respondents' assertions, I find that imports of ferrosilicon from Egypt have had a discernible adverse impact on the domestic industry and, therefore, are not negligible. In 1990, the quantity of imports of ferrosilicon from Egypt were only slightly below those from China, and were greater in terms of value.[15] This comparison is instructive in light of the Commission's affirmative final determination in *Ferrosilicon from the People's Republic of China*. Though there were no imports from Egypt in 1991, imports of ferrosilicon from Egypt in 1992 were more than double the 1990 level and accounted for 1.3 percent of total U.S. consumption.[16] In fact, the 1992 imports from Egypt were 58 percent greater by volume than imports from China during the same year.[17] Thus, I note the apparent inconsistency of finding imports from Egypt to be "negligible" when a majority of the Commission recently determined that imports from China, the volume of which was far less in 1992 than the volume of imports from Egypt, were found to be a cause of material injury to the domestic industry.

Moreover, as the Commission determined in each of the previous affirmative final investigations, the domestic ferrosilicon market is very price sensitive and even a small quantity of unfair imports in the marketplace may have a discernible adverse effect on domestic prices.[18]

I thus find that imports of ferrosilicon from Egypt are not negligible and, therefore, must be cumulated with imports from Brazil, which are also subject to investigation.[19]

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[14] Report at II-27; Memorandum INV-Q-173 (Oct. 13, 1993). It must be additionally noted that not all imports from Egypt are of slag or off-specification material. To the contrary, at least one shipment from Egypt was of ferrosilicon 75, which competed directly with Brazilian and domestic ferrosilicon 75. Report at II-22.

[15] Report at Table 19.

[16] Report at Tables 19 and 20.

[17] Report at Table 19.

[18] *See* USITC Pub. 2606 at 25-26; USITC Pub. 2616 at 28-29.

[19] Although not relevant to the foregoing discussion, I note that had I not found injury to the domestic industry by reason of imports from Egypt and Brazil, I would cumulate these imports with those subject to recent antidumping duty orders.

II. Material Injury by Reason of the Subject Imports

Imports of ferrosilicon from Egypt and Brazil decreased from 42,095 silicon-content short tons ("short tons") in 1990 to 19,259 short tons in 1991, then increased significantly to 57,286 short tons in 1992.[20] Interim 1993 (January-June) imports were 39,760 short tons, compared to 28,766 short tons for the same period 1992.[21] The cumulated imports accounted for 11.8 percent of domestic consumption in 1990, 6.2 percent in 1991, 17.1 percent in 1992, and 23.0 percent in interim 1993 compared to 15.9 percent in interim 1992.[22]

The Commission obtained pricing data for three different ferrosilicon products. For all three products, domestic producers' weighted-average quarterly f.o.b. prices declined irregularly between the first quarter of 1990 and the second quarter of 1993.[23] Brazilian weighted-average quarterly f.o.b. price data were available for only one of the three products. The Brazilian price increased irregularly between the first quarter of 1990 and the second quarter of 1993, but remained below the price of the comparable domestic product.[24] In fact, for the fourteen quarters for which price comparisons were available, the Brazilian product undersold the domestic product in twelve of the quarters, by margins ranging between 1.4 percent and 16.8 percent.[25]

Only limited pricing data were available for ferrosilicon from Egypt. The one reported sale of Egyptian ferrosilicon 75 was priced below the comparable domestic product in every quarter for which domestic prices were obtained.[26] Similarly, the three reported sales of Egyptian ferrosilicon 65 were priced below the domestic like product in the majority of the quarters for which domestic prices were obtained.[27]

As noted earlier, as well as in the other recent investigations involving ferrosilicon, the domestic ferrosilicon industry is extremely price sensitive.[28] Thus the increase in imports is especially injurious to the domestic industry.[29] In addition, suppliers and purchasers frequently refer to several publications as a general guide to price trends and price levels,[30] leading to clear price signaling in the U.S. market.[31]

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[20] Report at Table 19.

[21] *Id.*

[22] Report at Table 20.

[23] Report at Table 21.

[24] Report at Tables 21, 22.

[25] Report at Table 24.

[26] Report at Tables 21, 23.

[27] *Id.*

[28] *See* USITC Pub. 2606 at 25-26; USITC Pub. 2616 at 28-29.

[29] *See, Sodium Thiosulfate from the Federal Republic of Germany, the People's Republic of China, and the United Kingdom,* Invs. Nos. 731-TA-465, 466 and 468 (Final), USITC Pub. 2358 (February 1991) at 16.

[30] *See* USITC Pub. 2606 at 25-26.

[31] *See, e.g., Coated Groundwood Paper from Austria, Belgium, Finland, France, Germany, Italy, the Netherlands, Sweden, and the United Kingdom,* Invs. Nos. 731-TA-486 through 494 (Preliminary), USITC Pub. 2359 (February 1991) at 39.

As such, price differences of less than a penny per pound of contained silicon can lead purchasers to switch suppliers.[32]

Moreover, total domestic ferrosilicon demand is price inelastic. Changes in ferrosilicon prices have little effect on the quantities demanded by the iron and steel industries or on the total cost of iron and steel production. There are few substitutes for ferrosilicon in iron and steel production, and the cost of ferrosilicon as an input is relatively small compared to the total cost of the finished product.[33] Hence, an increase in the volume of unfairly low-priced imports, which causes declining U.S. prices, comes at the expense of U.S. producers' domestic sales instead of increasing the total quantities of ferrosilicon demanded.

Finally, I find that the significant volume and price effects of the subject imports have had an adverse impact on the domestic producers of like products. First, domestic producers experienced actual declines in output, sales, market share, profits, return on investments, and capacity utilization during the period of investigation.[34] Second, several domestic producers ceased or decreased production during the period of investigation because of generally poor market conditions and their ability to purchase imported ferrosilicon more cheaply than they could produce it themselves.[35] There have also been negative effects on the domestic industry's cash flow, inventories, employment, wages, growth, ability to raise capital, research and development and investment.[36] Third, as previously discussed, I find that the subject imports have contributed to price depression in the domestic industry, through significantly increasing market share and by consistent underselling of the domestic like product.

III. Conclusion

For the foregoing reasons, I find that the domestic industry producing ferrosilicon is materially injured by reason of imports of this product from Egypt which is sold in the United States at less than fair value.

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[32] For example, prices are typically quoted to four digits past the decimal in dollars per pound of contained silicon. *See* USITC Pub. 2606 at 25-26.

[33] *See* USITC Pub. 2606 at 26.

[34] *See* Majority determination at "Condition of the Domestic Industry."

[35] *See* USITC Pub. 2606 at 28.

[36] Report at II-45; app. D.

PART II

INFORMATION OBTAINED IN THE INVESTIGATION

INTRODUCTION

Institution of Investigation No. 731-TA-642 (Final)

Following a preliminary determination by the U.S. Department of Commerce (Commerce) that imports of ferrosilicon[1] from Egypt are being, or are likely to be, sold in the United States at less than fair value (LTFV),[2] the U.S. International Trade Commission (Commission), effective June 25, 1993, instituted investigation No. 731-TA-642 (Final) under section 735(b) of the Tariff Act of 1930 (the Act),[3] to determine whether an industry in the United States is materially injured or threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports of such merchandise. Notice of the institution of the Commission's investigation and of a public hearing to be held in connection therewith was posted in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and published in the *Federal Register* on July 23, 1993.[4] Copies of the cited *Federal Register* notices are presented in appendix A. The hearing was held in Washington, DC, on September 14, 1993. A list of participants appearing at the hearing is presented in appendix B.

Commerce's final LTFV determination was published in the *Federal Register* on September 14, 1993.[5] The Commission notified Commerce of its final injury determination on October 22, 1993.

Institution of Investigation No. 731-TA-641 (Final)

Following a preliminary determination by Commerce that imports of ferrosilicon[6] from Brazil are being, or are likely to be, sold in the United States at LTFV,[7] the Commission, effective August 12, 1993, instituted investigation No. 731-TA-641 (Final) under section 735(b) of the Act, to determine whether an industry in the United States is materially injured or threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports of such merchandise. Notice of the institution of the Commission's investigation and of a public hearing to be held in connection

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[1] For purposes of this investigation, the subject product is ferrosilicon, a ferroalloy generally containing, by weight, not less than 4 percent iron, more than 8 percent but not more than 96 percent silicon, not more than 10 percent chromium, not more than 30 percent manganese, not more than 3 percent phosphorus, less than 2.75 percent magnesium, and not more than 10 percent calcium or any other element. Ferrosilicon is classified in subheadings 7202.21.10, 7202.21.50, 7202.21.75, 7202.21.90, and 7202.29.00 of the Harmonized Tariff Schedule of the United States (HTS).

[2] 58 F.R. 34564, June 28, 1993.

[3] 19 USC § 1673d(b).

[4] 58 F.R. 39566.

[5] 58 F.R. 48037.

[6] See footnote 1 for product definition.

[7] 58 F.R. 43323, Aug. 16, 1993.

therewith was posted in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and published in the *Federal Register* on August 26, 1993.[8] Copies of the cited *Federal Register* notices are presented in appendix A. The hearing was held in Washington, DC, on September 14, 1993, simultaneously with the hearing on investigation No. 731-TA-642 (Final). A list of participants appearing at the hearing is presented in appendix B. Commerce's final LTFV determination is scheduled to be made on December 27, 1993. The Commission is scheduled to notify Commerce of its final injury determination on January 24, 1994.

Background

This investigation results from a petition filed by five U.S. producers of ferrosilicon and three associated unions,[9] on January 12, 1993, alleging that an industry in the United States is materially injured, or threatened with material injury, by reason of LTFV imports of ferrosilicon from Brazil and Egypt. In response to that petition, the Commission instituted investigations Nos. 731-TA-641-642 (Preliminary) under section 733(a) of the Act,[10] and on February 26, 1993, determined that there was a reasonable indication of such material injury.

Previous Commission Investigations Concerning Ferrosilicon

On March 4, 1993, the Commission determined, pursuant to section 735(b) of the Act, that an industry in the United States is materially injured by reason of LTFV imports of ferrosilicon from China.[11] On March 23, 1993, the Commission made similar affirmative determinations regarding LTFV imports of ferrosilicon from Kazakhstan and Ukraine.[12] On

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[8] 58 F.R. 45120.

[9] The petitioners in both investigations are: AIMCOR, Pittsburgh, PA; Alabama Silicon, Inc., Bessemer, AL; American Alloys, Inc., Pittsburgh, PA; Globe Metallurgical, Inc., Cleveland, OH; Silicon Metaltech, Inc., Seattle, WA; Oil, Chemical & Atomic Workers Union (local 389); United Autoworkers of America Union (locals 523 and 12646); and United Steelworkers of America Union (locals 2528, 3081, and 5171).

[10] 19 USC § 1673(a).

[11] Inv. No. 731-TA-567 (Final), USITC Publication 2606, March 1993. The Commission's final determination was published in the *Federal Register* on Mar. 11, 1993 (58 F.R. 13503). The final LTFV margin for all manufacturers, producers, and exporters in China was found by Commerce to be 137.73 percent. The final antidumping duty order was published in the *Federal Register* on Mar. 11, 1993 (58 F.R. 13448).

[12] Invs. Nos. 731-TA-566 and 569 (Final), USITC Publication 2616, March 1993. The Commission's final determinations were published in the *Federal Register* on Mar. 31, 1993 (58 F.R. 16847). The final LTFV margin for all manufacturers, producers, and exporters in Kazakhstan and Ukraine was found by Commerce to be 104.18 percent.

June 16, 1993, the Commission made affirmative determinations regarding LTFV imports of ferrosilicon from Russia and Venezuela, and subsidized imports from Venezuela.[13]

On January 24, 1984, the Commission determined, pursuant to section 406 of the Trade Act of 1974, that market disruption did not exist as a result of imports of ferrosilicon from the Union of Soviet Socialist Republics (U.S.S.R.).[14] Although the Commission noted that imports of ferrosilicon from the U.S.S.R. were increasing rapidly and that domestic ferrosilicon producers were suffering material injury, it determined that the imports were not a significant cause of material injury or threat thereof.

THE PRODUCT

Description and Uses

The following are definitions of terms used throughout this report:

Term	Definition
Briquettes	A size description for a block of compressed ferrosilicon; also, describes the process by which ferrosilicon fines are bound together with a binder under pressure to form a material suitable for further use.
Fines	Small (ranging from dust-size to below standard sizes), nonstandard sizes of ferrosilicon that arise from processing. Typically need to be briquetted prior to further use.
Ferrosilicon 50	A ferroalloy containing by weight between 47 percent and 51 percent silicon and not less than 4 percent iron, with impurities of sulfur, phosphorus, aluminum, or manganese not exceeding ASTM stated limits.

[13] Invs. Nos. 303-TA-23 (Final) and 731-TA-568 and 570 (Final), USITC Publication 2650, June 1993. The Commission's final determinations were published in the *Federal Register* on June 23, 1993 (58 F.R. 34064). Final LTFV margins for manufacturers, producers, and exporters in Russia and Venezuela were found by Commerce to be 104.18 and 9.55 percent, respectively. Final antidumping duty orders were published in the *Federal Register* on June 24, 1993 (58 F.R. 34244). The final countervailing duty (CVD) rate for imports from Venezuela was determined by Commerce to be 22.08 percent ad valorem. The final CVD order was published in the *Federal Register* on July 7, 1993 (58 F.R. 36394).

[14] *Ferrosilicon from the Union of Soviet Socialist Republics: Determination of the Commission in Investigation No. TA-406-10*, USITC Publication 1484, February 1984.

Term	Definition
Ferrosilicon 65	A ferroalloy containing between 65 percent and 70 percent silicon and not less than 4 percent iron by weight, with impurities of sulfur, phosphorus, aluminum, and manganese. Off-specification ferrosilicon 65 is a composite of off-specification grades of ferrosilicon 50 and ferrosilicon 75 and is subject to wide variations in chemical composition and recoverable metallics.
Ferrosilicon 75	A ferroalloy containing between 74 percent and 79 percent silicon and not less than 4 percent iron by weight, with impurities of sulfur, phosphorus, aluminum, and manganese not exceeding ASTM stated limits. Specialty grades are differentiated by lower amounts of impurities, particularly aluminum.
Rakeouts and skulls	Material that builds up on the inside of the ladle and is periodically removed. May be mixed with slag material and sold as "rakeouts."
Slag	Ladle surface scum that contains silicon and oxidized impurities. Slag is emitted during capping and skimmed or raked from the top of the ladle. Considered a waste product. Also referred to as dross and skimmings.

Ferrosilicon is an alloy of iron and silicon used primarily by steel producers and iron casters, as discussed below. Although the product subject to investigation encompasses ferrosilicon containing from 4 percent to 96 percent silicon, in practice the product is sold within a few set ranges of silicon content. The most common are ferrosilicon 50 and ferrosilicon 75, which in 1991 accounted for 53 percent and 42 percent of total U.S. apparent consumption, respectively. By industry standards, ferrosilicon 50 contains between 47 percent and 51 percent silicon by weight. Similarly, ferrosilicon 75 contains 74 percent to 79 percent silicon by weight. Silvery pig iron, which has a silicon content under 25 percent by weight, accounted for 4 percent of total U.S. apparent consumption during 1991. The remaining 1 percent of apparent consumption of ferrosilicon is accounted for by specialty grades, which include ferrosilicon 65 and proprietary grades.

In addition to silicon content, ferrosilicon is sold according to the presence of other elements, some of which are considered impurities and others of which are considered enhancements. Elements that are considered impurities (e.g. phosphorus, sulfur, and aluminum) must be kept under set percentages in order for the ferrosilicon to be useable.[15]

[15] Many of the more common limits for the maximum content of impurities are set by the American Society for Testing and Materials (ASTM). For example, aluminum is typically specified to not exceed

(continued...)

Regular, or commodity, grade ferrosilicon generally has close to the maximum allowable amount of the undesired elements. Ferrosilicon with substantially lower amounts of these elements is referred to as high-purity. One high-purity grade that is common is low-aluminum ferrosilicon, which, for ferrosilicon 50, would contain a maximum of 0.4 percent aluminum by weight, as opposed to a maximum of 1.25 percent for regular grade ferrosilicon 50. Foundry grade ferrosilicon, specified for cast-iron applications, has a minimum amount of calcium or other minor elements. Regular, high-purity, and foundry grades of ferrosilicon are considered standard grades, as distinct from specialty grades.

Specialty grades include ferrosilicon with specific percentages of supplemental minor elements (e.g., chromium, copper) that add desired properties to the ferrosilicon. Because specialty grades were often designed by ferrosilicon producers to meet the needs of a particular application, many have trademark protection, and are sold as proprietary grades. By convention, the term "specialty grades" also refers to ferrosilicon that is neither ferrosilicon 50 nor ferrosilicon 75, such as ferrosilicon 65.

Another characteristic that is specified in the sale of ferrosilicon is size.[16] Size is important because it affects the performance of the ferrosilicon. Lumps are generally preferred over fines. Lumps added for deoxidizing purposes to the furnace are generally large, because then they are heavy enough to penetrate the layer of slag on top of the molten metal. Smaller lumps are more commonly used for alloying purposes in the ladle, where they are dissolved more quickly. Fines are less desirable than lumps because it is more difficult to recover the silicon content in them. To overcome this, fines are often shaped in a mold and held together by a binding agent to form briquettes.

The principal use of ferrosilicon 50 and ferrosilicon 75 is as an alloying agent in the production of steel and cast iron. When added to molten steel, ferrosilicon can improve the strength, toughness, corrosion resistance, and magnetic properties of the finished products. Similarly, when added to molten iron, ferrosilicon makes the cast iron softer, more machineable, and heat- and corrosion-resistant. Besides its role as an alloying agent, ferrosilicon serves other functions. It is used by steelmakers as a deoxidizer[17] and a reducing agent,[18]

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[15] (...continued)
1.25 percent. However, steel industry practice has been to specify much lower limits for impurities, including aluminum (typically 0.5 percent maximum), to limit their deleterious effects on continuous casting.

[16] Sizes vary from 8" by 4" to 1/4" by down. "Down," when used as minimum size, means that a high percentage (15 to 20 percent) of the material can pass through a small sieve. For example, in 4" by down ferrosilicon, "down" refers to a minimum dimension of 1/4"; in 1" by down product, "down" may have no minimum size dimension. Petition, p. 10.

[17] When ferrosilicon is added to the molten steel, silicon combines with oxygen, thereby reducing the oxygen content to a minimum. The presence of oxygen can result in the presence of undesired bubbles in the solidified steel.

[18] When ferrosilicon is added to molten steel, some of the silicon reduces the metal oxides present in the layer of slag floating on the top of the bath. The silicon combines with the oxygen, allowing desired materials, such as chromium, to sink into the bath.

and by cast iron producers as an inoculant.[19] The function that the ferrosilicon actually serves depends on several factors, including its grade, size, and the stage in the process in which it is added to the molten metal.

Cast iron producers, unlike steel producers, are typically able to use ferrosilicon with higher levels of impurities and more chemical variability in their foundries. These operations melt iron in coke-fed cupolas; production variables, including the amount and size of coke, types and grades of iron units, and other charge materials (including ferroalloys), may differ significantly among producers depending on product mix and operating practice.[20] Hence, some iron producers may purchase specially-blended lots of ferroalloys that other iron producers might find unacceptable. Within the steel industry, ferrosilicon is most commonly used in the production of stainless and heat-resisting steels. Although these grades make up less than 5 percent of total production of steel, they accounted for about 55 percent of the consumption of ferrosilicon by the steel industry in 1992.[21] Ferrosilicon also provides the desired magnetic properties for the production of electric sheet steels.

Steel and iron producers have the technical capability to use either grade of ferrosilicon in their production process. Although steel companies would generally prefer to use the higher grade, ferrosilicon 75,[22] some producers are more readily able than others to use either grade.[23] The decision to use a specific grade is initially made by comparing costs on a per-unit-of-silicon basis. Once a grade is selected, however, switching is infrequent because it involves costs that are normally greater than the potential savings of using a new, cheaper grade. When a steel or cast-iron producer switches ferrosilicon grades, all the steelmaking or ironmaking ingredients are affected and must be adjusted. Although computers help producers make the necessary changes, in practice it may take plant operators several days before they can run the furnace efficiently or produce iron or steel to tight metallurgical specifications. Frequent switching also runs the risk of confusing plant operators, who, by inadvertently adding one grade of ferrosilicon instead of the other, could ruin an entire heat of iron or steel. Furthermore, as ferrosilicon represents a small part of the total cost of steelmaking, the potential savings from the switch are generally minor.

If the gap in the price for ferrosilicon 50 and ferrosilicon 75 (on a per-unit-of-silicon basis) becomes wide, and the gap appears likely to last for more than a brief period, switching becomes more likely. The threshold point is difficult to define, because it varies from one producer to another. However, the gap in ferrosilicon 50 and ferrosilicon 75 prices

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[19] As an inoculant, ferrosilicon changes the graphite structure of the iron, resulting in a softer and more machineable cast-iron product.

[20] Posthearing brief of Rogers & Wells, exhibit 1.

[21] U.S. Bureau of Mines, *Commodity Industry Survey: Silicon 1992 Annual Report*, table 3, p. 10.

[22] Switching from ferrosilicon 75 to ferrosilicon 50 means the steelmaker must consume approximately 50 percent more ferrosilicon per ton of steel produced, but that introduces higher amounts of impurities such as aluminum and calcium. Telephone conversation with *** on Sept. 28, 1993.

[23] In limited applications, ferrosilicon 50 cannot substitute for ferrosilicon 75. For example, in argon oxygen decarburization (AOD) furnaces used for specialty steelmaking, ferrosilicon 50 introduces too many contaminants to be useful. ***, telephone conversation, June 16, 1992.

has generally been below that threshold in recent years, as ferrosilicon producers and steel industry representatives report few instances of switching.

Outside of the steel and cast-iron industries, consumption of ferrosilicon is relatively minor, with such uses accounting for an estimated 16 percent of total apparent consumption.[24] Producers of magnesium, nickel, ferrovanadium, and metallic sodium all use small quantities of ferrosilicon.

Applications for silvery pig iron are limited. In most cases, it is used in the production of gray cast iron.[25] Some foundries prefer silvery pig iron to ferrosilicon 50 because silvery pig iron has unique magnetic properties that facilitate handling. Silvery pig iron in a finely ground form is also used for its magnetic properties in the separation of heavy and medium ores (e.g., fluorite, barite) from waste materials.

Production Processes

Ferrosilicon is produced by smelting iron and silicon in a submerged-arc electric furnace, in which large carbon electrodes extend into the furnace and supply the electrical energy needed to produce high temperatures.[26] The iron comes in the form of iron or steel scrap, whereas the silicon content comes from silica (SiO_2) in the form of quartzite. These are combined in the furnace together with a carbonaceous material (e.g., low-ash coal, petroleum coke, or coal char) and wood chips or other bulking agents, which give the furnace mixture the desired porosity to allow an even flow of the reactant gases. The submerged-arc furnace can be either covered or open. While open furnaces burn off carbon monoxide as a byproduct, covered furnaces recover the gas and use it as a source of power for furnace operation. By reducing energy consumption, covered furnaces can lower operating costs. For technical reasons, however, furnaces used in the production of ferrosilicon 75 cannot be covered.[27]

As the submerged-arc furnace reaches its operating temperature, the carbon from the coal or coke separates the silicon of the quartzite from its oxygen, leaving the silicon to combine with the iron from the scrap to form ferrosilicon, and the oxygen to combine with the carbon to form carbon monoxide as a byproduct gas.[28]

As molten ferrosilicon accumulates in the furnace, it is drawn off into ladles (figure 1). While in the ladle, the molten ferrosilicon may undergo further refinement. Because the raw

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[24] Estimated based on statistics of the U.S. Bureau of Mines, *Ferroalloys: Annual Report 1990*, statistics prepared by Clark R. Neuharth, April 1992, p. 22.

[25] Gray iron is distinguished from other cast iron (ductile, malleable) by the presence of flake graphite. It accounts for approximately 60 percent of cast iron produced in the United States.

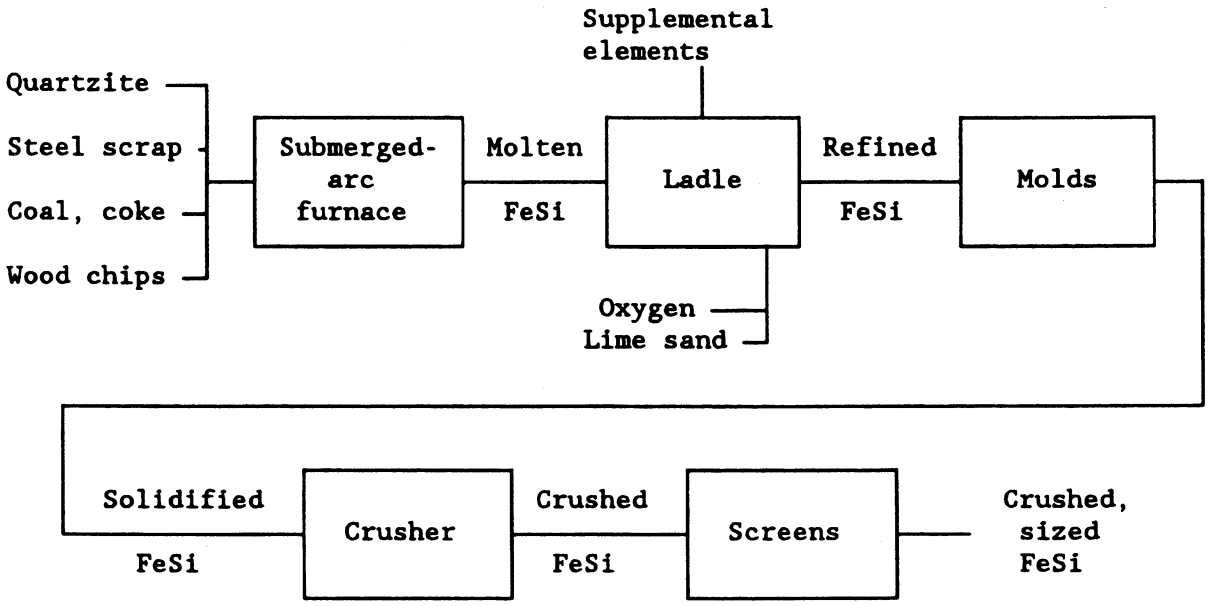
[26] Because of the tremendous quantity of electricity required to run ferrosilicon furnaces (*** million kilowatt hours of energy consumed each month by American Alloys' facility), new air pollution control standards resulting in the higher cost of electricity have increased the cost of producing ferrosilicon in the United States. Transcript of the Commission's conference in investigations Nos. 303-TA-23 and 731-TA-565-570 (Conference TR), p. 15.

[27] Conference TR, p. 125.

[28] The basic chemical reaction is $SiO_2 + 2C + Fe \rightarrow FeSi + 2CO$.

materials frequently contain elements that are considered impurities, oxygen or lime sand may be injected into the mixture, where they combine with the unwanted elements (e.g., aluminum, calcium) to form slag. However, oxygen and lime sand will not combine with other unwanted elements (e.g., manganese, titanium, and chromium), so it is essential that the raw materials be carefully selected.

Figure 1
Ferrosilicon: Simplified production flowchart



After the ferrosilicon undergoes any necessary refinement in the ladle, it is poured into cast iron molds or onto a bed of ferrosilicon fines, where it is cooled.[29] The solidified product is then crushed into the size required by customers. Both lumps (standard sizes) and fines (small, nonstandard sizes) are produced in the crushing operation. One alternative to the casting and crushing operation is the pouring of the molten ferrosilicon into a high-powered water stream. The force and cooling effect of the water forces the molten material to solidify into uniform chunks.

[29] In the case of silvery pig iron, ferrosilicon is cast into small blocks of standard size, typically weighing 12.5 pounds. The blocks are referred to as piglets.

The production process yields approximately 3 percent waste (in the form of slag and skimmings, furnace or ladle rakeouts, ladle skulls, and fines) when operating normally.[30] Slag (dross) forms on the surface of molten ferrosilicon in the ladle after pouring. It usually contains oxides of silicon as well as ferrosilicon and may be crushed, sized, and combined with fines for sale. Often, furnace or ladle rakeouts and ladle skulls that contain high levels of metallic silicon are recycled by the smelter itself; alternatively they may be sold directly or mixed with slag, crushed, screened to size, and sold to processors and to iron foundries.

Domestic producers also sell fines, material that is of good quality but too small to be utilized by primary customers, or arrange to have them toll-processed at companies making briquettes. Fines and silicon-containing dust also may be used in the casting process as a liner, sold as a filler material to cement and chemical companies, or utilized in roadbed construction. According to an industry executive, there are fewer than 10 briquetters in the United States; according to this same person, fines imported from Egypt differ significantly from domestic fines in terms of their size, approximately 3 mm.[31] Both processors that use Egyptian fines combine them with higher grade, larger sized material to upgrade their quality and to make specialized blends.

Off-grade ferrosilicon, slag[32] and skimmings, ladle skulls, and furnace rakeouts are also generated in the course of production as a result of furnace operations outside normal operating parameters. Their chemical and metallurgical composition may differ significantly from the producer's normal quality ferrosilicon and from the products discussed earlier.[33] If the furnace is not operating properly, a higher percentage of waste is typically generated. This is typical of startup operations (i.e., when a new furnace comes on line and a relatively large but declining portion of waste is generated), or when there are interruptions in the supply of electricity or variations in the quality of inputs.

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[30] Interview with ***. Waste yield may be higher depending on how many of these items the smelter is able to recycle itself. For example, American Alloys indicated its waste yield is approximately 8 to 10 percent. Hearing TR, p 58.

[31] Telephone conversation with *** on Sept. 28, 1993.

[32] According to ***, slag imported from Egypt differs from slag produced by domestic ferrosilicon producers. Whereas the domestic industry considers slag as a material that is skimmed or raked from the top of the ladle (and equivalent to ladle or furnace rakeout and ladle skull in terms of its higher quality), slag imported from Egypt consists of a heavily contaminated waste product produced when the furnace is tapped. It reportedly contains little recoverable silicon, with the remainder consisting of various other elements, such as silicon carbide, silicon dioxide, unreduced quartz, and other impurities. Compare Hearing TR, p. 23 (Mr. Beard) with Hearing TR, p. 106 (Mr. Krauskopf), and posthearing brief of Rogers & Wells, p. 3.

[33] A representative of *** stated that there is variability between lots coming from the same producer, as well as from different producers, because of differences in production variables (electric power and raw material inputs, for example). The Egyptian ferrosilicon, slag, and other products may be high in unusable oxides and too rich in tramp elements such as aluminum and calcium, and may suffer from heterogeneity (the usable metallics are layered); there may be an unpredictable mix of sizes of material within lots as well. Posthearing brief of Rogers & Wells, p. 4.

According to ***, there are two U.S. processors of off-grade ferrosilicon, based in areas with a concentration of companies producing cast iron. According to ***, the material imported from Egypt consists of approximately *** percent fines, *** percent off-grade specification ferrosilicon 65, and *** percent slag.[34] Fines are sorted and combined with prime grade fines from domestic and other imported sources to form briquettes; as noted earlier, fines imported from Egypt are typically smaller than domestically produced fines and complement domestic-origin fines. Slag and off-grade material[35] are visually inspected and obvious contaminants removed (unreduced quartz and carbon furnace electrodes, for example), and a check sample analysis is usually made. Thereafter, each lot undergoes additional removal of contaminants, is crushed in a jaw crusher and then in a roll crusher, screened, and sorted by size. The sized products are then taken and stored for resale or for briquetting. Another sample analysis is made to verify silicon content and the material is then dried, following which it may be blended with other material of a higher quality (typically ferrosilicon 75) to customer order.[36]

The value added in this process may be in excess of 100 percent of the value of the imported material, and it may require several months to treat (involving screening, crushing, blending, drying, inspection, and bagging) each lot.[37] According to ***, ferrosilicon slag is not available domestically in the quantities and varieties required because U.S. producers do not generate commercial quantities and the small amounts they do generate are of a high enough quality to be channeled directly to consumers outside the steel industry.[38] Although "prime-grade" fines can be and are purchased by the processors, slag and off-specification grades are not interchangeable with prime-grade materials. This is true even if they both possess the same nominal silicon content because of the higher concentrations of nonmetallic material and the lack of homogeneity usually found in slag and off-grade material.

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[34] Posthearing brief of Rogers & Wells, exhibit 1.

[35] This off-grade specification (similar to ferrosilicon 65) reportedly results from below-standard furnace operations, raw material problems, power variation, and other operating problems. It is said to be an unpredictable mix of off-specification material that is on the average 65 percent silicon content, but contains crumbling material and suffers from chemical variability, different sizes, and large amounts of nonmetallic silicon. Posthearing brief of Rogers & Wells, p. 4, and interview with *** on Aug. 20, 1993.

[36] Posthearing brief of Rogers & Wells, exhibit 1. As noted, this custom blending, which is not commonly performed by domestic ferrosilicon producers, produces a tailor-made alloy addition for individual foundries with different operating practices.

[37] Interview with *** on Aug. 20, 1993. While run-of-production waste may be of a similar chemical or metallurgical quality, the slag and waste produced from a startup operation or because of furnace or operating problems may differ considerably between lots. This means that the processor purchases this waste with a specific customer and application in mind and custom-blends the material to increase its homogeneity and chemistry. According to a spokesman for one processor, the processor serves a niche market comprised of specific customers who can utilize a custom blended, off-grade material and consumers who cannot purchase elsewhere. Likewise, the imported waste and scrap cannot be sold other than to a processor because of its needed treatment; in other words, this material is distributed in a way different from that of the bulk commercial-grade ferrosilicon.

[38] ***.

Substitute Products

There are few substitute products for ferrosilicon. Those that exist generally either cost more, introduce undesired elements, or both. The usefulness of ferrosilicon lies in the contained silicon. Iron only serves as the carrier. For cast iron and steel applications, iron is the ideal carrier because when the ferrosilicon is added to the bath, the iron blends into the molten metal, which is itself iron based. When silicon is carried by other materials, the carrier material often is a contaminant. For example, silicon carbide, an alloy of silicon and carbon, is rarely used in the steel industry because carbon is a contaminant for steel. It is, however, used by cast iron producers, for whom the presence of carbon presents less of a problem.

Silicomanganese is an alloy that can substitute simultaneously for ferrosilicon and ferromanganese. Because manganese and silicon are the most common alloying agents in the steel industry, applications that make use of both are common. The decision to use silicomanganese in place of ferrosilicon and ferromanganese is basically made on the basis of cost (i.e., whichever is cheaper on a per-unit silicon and per-unit manganese basis). However, producers generally prefer to work with ferrosilicon and ferromanganese separately, because they alone are sufficient to meet all their silicon and manganese requirements.[39]

Silicon metal, which contains 96 percent or more of silicon by weight, is generally not an economical substitute for ferrosilicon 50 or ferrosilicon 75, because the cost per unit of silicon is substantially higher in silicon metal.[40]

Other elements and ferroalloys that may also substitute for ferrosilicon include ferrochrome silicon and ferromanganese silicon (as alloys), and aluminum and ferromanganese (as deoxidizers). In practice, these products rarely substitute for ferrosilicon because they are more expensive. In addition, for certain steels, using aluminum for deoxidizing would increase the aluminum content to unacceptable levels.[41] With respect to inoculation, research has resulted in the discovery of other elements besides silicon that serve inoculant functions, specifically calcium, aluminum, and strontium. The use of these substitutes is limited, however, by cost considerations and negative side effects. For example, although calcium is a more effective inoculant than silicon, it can cause the formation of undesirable slag and waste product.[42]

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[39] ***, telephone conversation, June 15, 1992.

[40] ***, telephone conversation, June 15, 1992. Steel producers would substitute silicon metal for ferrosilicon only if the grade of steel had a specified maximum for iron. This application is limited.

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[42] Elkem, *The Inoculation of Gray Cast Irons*, p. 10.

U.S. Tariff Treatment

Imports of ferrosilicon are classified in Harmonized Tariff Schedule (HTS) subheadings 7202.21.10, 7202.21.50, 7202.21.75, 7202.21.90, and 7202.29.00. Rates of duty for these HTS subheadings are presented in the tabulation presented below.

Subheading/eligibility status	Duty column	Rate of duty (percent ad valorem)
Subheading 7202.21.10:		
MFN countries[1]	Column 1—General	1.1
GSP[2]	Column 1—Special	Free
Subheading 7202.21.50:		
MFN countries[1]	Column 1—General	1.5
GSP[2]	Column 1—Special	Free
Subheading 7202.21.75:		
MFN countries[1]	Column 1—General	1.9
Subheading 7202.21.90:		
MFN countries[1]	Column 1—General	5.8
Subheading 7202.29.00:		
MFN countries[1]	Column 1—General	Free
GSP[2]	Column 1—Special	Free

[1] Countries eligible for most-favored-nation tariff treatment.
[2] Countries eligible for special tariff treatment under the Generalized System of Preferences.

U.S. imports of ferrosilicon containing by weight more than 55 percent but not more than 80 percent of silicon are classified in subheadings 7202.21.10 and 7202.21.50 of the HTS. The most-favored-nation (MFN) (column 1-general) rates of duty, applicable to products of Brazil and Egypt and all other MFN countries, are 1.1 and 1.5 percent ad valorem, respectively. Such imports of ferrosilicon from Egypt may be eligible for duty-free entry under the Generalized System of Preferences (GSP), based on importer request and a showing that shipments qualify. Imports classified under these HTS subheadings from Brazil are not eligible for GSP duty-free entry.

The rate of duty for ferrosilicon containing by weight more than 80 percent but not more than 90 percent of silicon (HTS subheading 7202.21.75) is 1.9 percent ad valorem under column 1-general. The rate of duty for ferrosilicon containing by weight more than 90 percent of silicon (HTS subheading 7202.21.90) is 5.8 percent ad valorem under column 1-general. For these two subheadings, imports are not eligible for duty-free entry under the GSP. U.S. imports of all other ferrosilicon from countries entitled to the column 1-general duty rate enter unconditionally free of duty under subheading 7202.29.00.

THE NATURE AND EXTENT OF SALES AT LTFV

Egypt

On September 14, 1993, Commerce published in the *Federal Register* notice of its final determination regarding imports of ferrosilicon from Egypt.[43] In its final determination, Commerce found that imports of ferrosilicon from Egypt are being, or are likely to be, sold in the United States at LTFV as provided for within section 735 of the Act. The final estimated weighted-average dumping margin for all producers, manufacturers, and exporters in Egypt is 90.50 percent.[44] The period of Commerce's review was July 1, 1992, through December 31, 1992.

Brazil

LTFV Margins

On August 16, 1993, Commerce published in the *Federal Register* notice of its preliminary determination regarding imports of ferrosilicon from Brazil.[45] In its preliminary determination, Commerce found that imports of ferrosilicon from Brazil are being, or are likely to be, sold in the United States at LTFV as provided for within section 735 of the Act. The preliminary weighted-average dumping margin for all producers, manufacturers, and exporters in Brazil is 28.22 percent.[46] The period of Commerce's review was July 1, 1992, through December 31, 1992. Commerce is scheduled to make its final determination in this investigation on December 27, 1993.

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[43] 58 F.R. 48037.

[44] Commerce made its final determination using "best information available" (BIA) pursuant to section 776(c) of the Act. The final margins were based on the highest margins contained in the petition.

[45] 58 F.R. 43323.

[46] Commerce made its preliminary determination using BIA pursuant to section 776(c) of the Act. Preliminary margins were based on a simple average of the LTFV margins contained in the petition, as amended, as of the date of initiation.

Critical Circumstances

Petitioners alleged the existence of "critical circumstances" within the meaning of section 735(a)(3) of the Act with respect to imports of ferrosilicon from Brazil. The Act states that in any investigation in which the presence of critical circumstances has been alleged, Commerce shall make a specified finding including whether there have been massive imports of the subject merchandise over a relatively short period.[47]

On August 16, 1993, Commerce published in the *Federal Register* notice of its preliminary determination regarding critical circumstances.[48] Based on BIA and official import statistics, Commerce found that critical circumstances exist with respect to imports from all companies in Brazil.

If Commerce makes a final affirmative determination with respect to critical circumstances, the Commission must make a finding concerning the retroactive imposition of any antidumping duties.[49] The purpose of this provision is to provide relief from effects of massive imports, and to deter importers from attempting to circumvent the laws by making massive shipments immediately after the filing of a petition.[50]

Official Commerce monthly import data on imports of ferrosilicon from Brazil are presented in table 1 and figure 2. These data show an unusually large increase in imports in March 1993.

The petition concerning Brazil was filed on January 12, 1993. The Commission made its preliminary injury determination on imports from Brazil on February 26, 1993. Commerce published its preliminary LTFV determination concerning imports from Brazil in the *Federal Register* on August 16, 1993.

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[47] Commerce compared the import volumes for August 1992 through December 1992 as the base period, and January 1993 through May 1993 as the comparison period. Based on this analysis, imports increased by more than 15 percent.

[48] 58 F.R. 43323.

[49] 19 USC § 1673d(b)(4).

[50] See H.R. Rep. No. 317, 96th Cong., 1st Sess. 63 (1979).

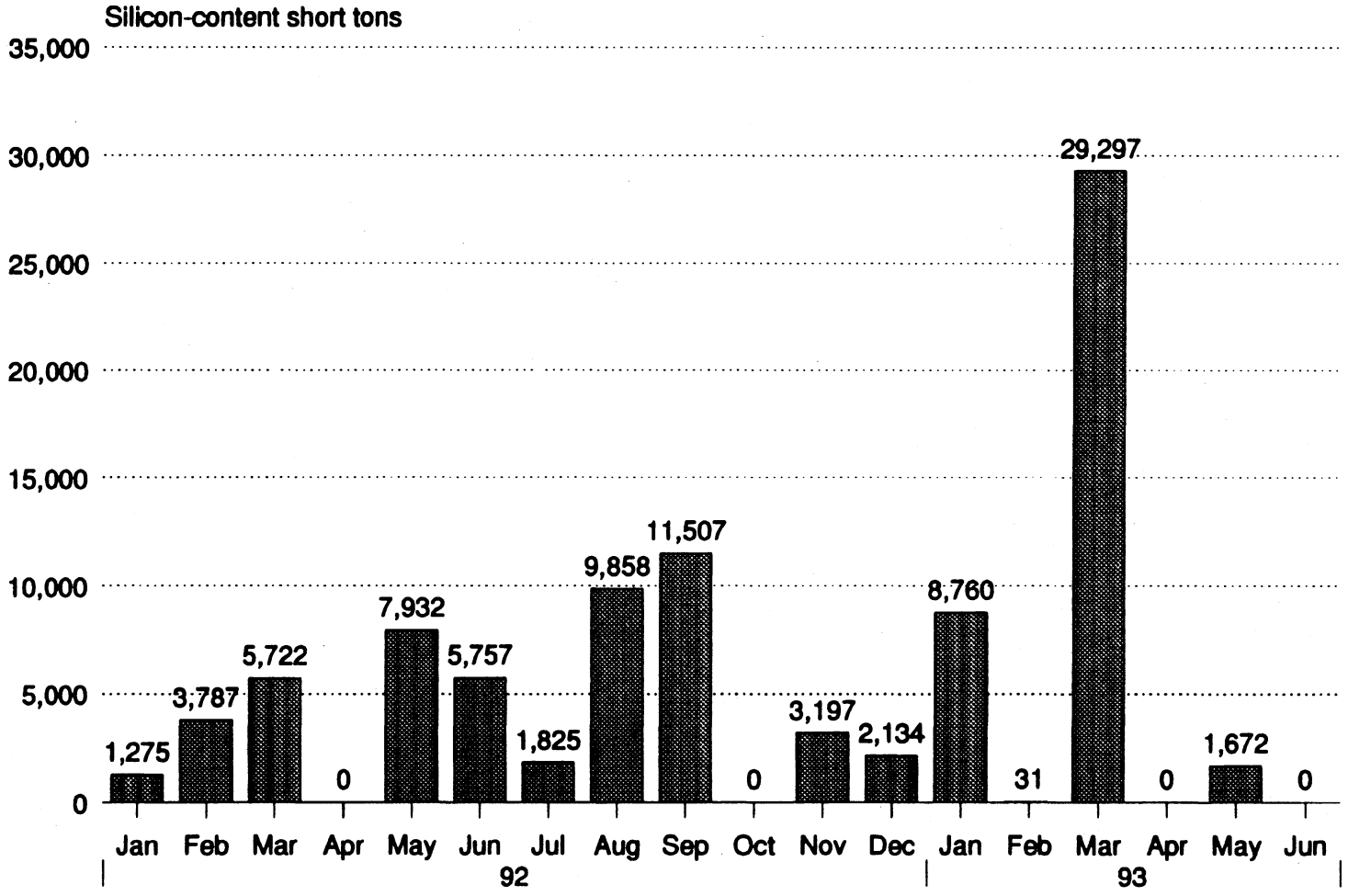
Table 1
Ferrosilicon: U.S. imports from Brazil, by months, Jan. 1992-June 1993[1]

Year/month	Quantity	Value[2]
	Silicon-content short tons	*1,000 dollars*
1992:		
January	1,275	639
February	3,787	2,276
March	5,722	3,414
April	0	0
May	7,932	4,921
June	5,757	3,778
Subtotal	24,474	15,028
July	1,825	1,131
August	9,858	6,679
September	11,507	7,990
October	0	0
November	3,197	2,000
December	2,134	1,405
Subtotal	28,520	19,204
Total	52,994	34,232
1993:		
January	8,760	5,976
February	31	28
March	29,297	18,819
April	0	0
May	1,672	610
June	0	0
Subtotal	39,760	25,433

[1] Includes HTS subheadings 7202.21.50.00, 7202.21.75.00, and 7202.21.90.00, and 7202.29.00.50.
[2] Landed duty paid.

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

Figure 2
Ferrosilicon: U.S. imports from Brazil, by months, Jan. 1992-June 1993



Source: Table 1.

THE U.S. MARKET

Apparent U.S. Consumption

Data on apparent consumption of ferrosilicon based on U.S. producers' shipments and official U.S. imports are presented in table 2 and figure 3. Apparent consumption, based on quantity, decreased 6.2 percent during the period 1990-92 and decreased 4.4 percent between the interim periods January-June 1992 and January-June 1993.

Apparent Consumption by Product Grade

Based on estimates from data collected in previous investigations, high-silicon-content grade ferrosilicon (56 percent silicon-content or above) accounted for 54 percent of apparent U.S. consumption during the period January 1989-September 1992. Low-silicon-content grade ferrosilicon (55 percent silicon-content or below) accounted for 46 percent of apparent U.S. consumption during this period.

The following tabulation presents the shares (in percent), by product grade categories, of U.S. producers' shipments (January 1989-September 1992) and imports from Brazil and Egypt (January 1990-June 1993):

Item	High-silicon-content grade ferrosilicon	Low-silicon-content grade ferrosilicon
U.S. producers' shipments	40.0	60.0
Imports from Brazil	91.3	8.7
Imports from Egypt	65.1	34.9

Based on questionnaire responses obtained from previous investigations, approximately 40 percent of U.S. producers' shipments during the period January 1989-September 1992 were high-silicon-content grade ferrosilicon while approximately 60 percent of U.S. producers' shipments were low-silicon-content grade ferrosilicon. Based on official statistics of Commerce, approximately 91 percent of imports from Brazil during the period January 1990-June 1993 were high-silicon-content grade silicon (ferrosilicon 75) while approximately 9 percent of imports were low-silicon-content grade ferrosilicon (ferrosilicon 50 and slag). Approximately 65 percent of imports from Egypt during this period were high-silicon-content grade ferrosilicon (mostly ferrosilicon 65) while approximately 35 percent were low-silicon-content grade ferrosilicon (slag).

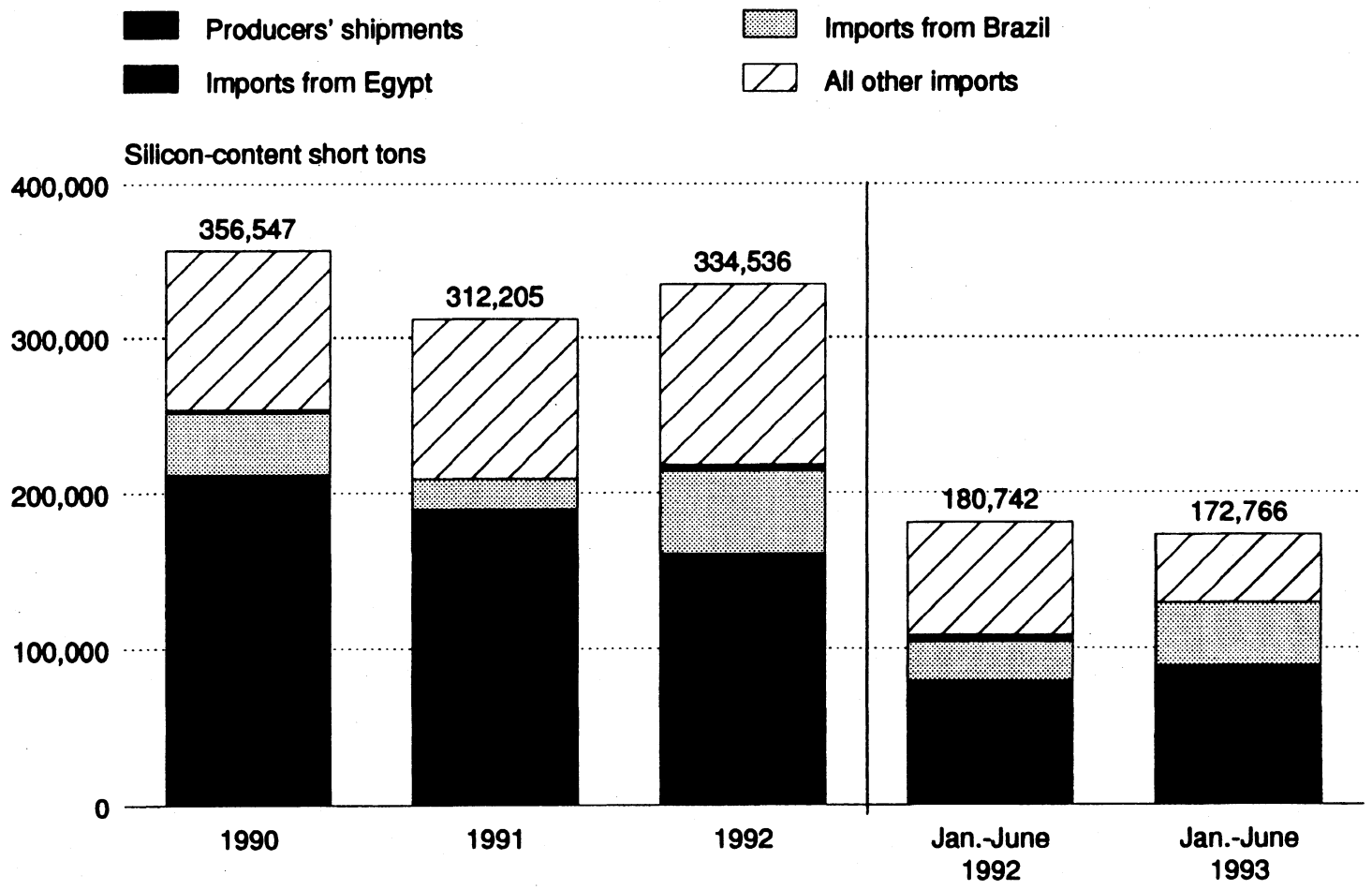
Table 2
Ferrosilicon: U.S. shipments of domestic product, U.S. imports, and apparent U.S. consumption, 1990-92, Jan.-June 1992, and Jan.-June 1993[1]

Item	1990	1991	1992	Jan.-June-- 1992	1993
	Quantity *(silicon-content short tons)*				
Producers' U.S. shipments	211,429	189,724	160,504	79,315	88,760
U.S. imports from--					
Brazil	40,010	19,259	52,994	24,474	39,760
Egypt	2,085	0	4,292	4,292	0
Subtotal	42,095	19,259	57,286	28,766	39,760
China	3,324	3,324	2,716	0	14
Former U.S.S.R	18,578	17,710	33,687	33,687	0
Venezuela	25,708	32,969	25,793	14,867	8,288
Subtotal	89,705	73,262	119,483	77,320	48,062
Other sources	55,413	49,220	54,549	24,107	35,944
Total	145,118	122,481	174,032	101,427	84,006
Apparent consumption	356,547	312,205	334,536	180,742	172,766
	Value *(1,000 dollars)*				
Producers' U.S. shipments	183,795	153,129	132,054	64,179	73,794
U.S. imports from--					
Brazil	30,874	11,454	34,232	15,028	25,433
Egypt	2,556	0	2,008	2,008	0
Subtotal	33,430	11,454	36,239	17,036	25,433
China	2,010	2,442	1,722	0	57
Former U.S.S.R	14,363	12,485	22,299	22,299	0
Venezuela	15,416	20,964	15,083	8,459	4,952
Subtotal	65,219	47,345	75,343	47,794	30,443
Other sources	44,451	39,366	42,264	18,255	27,836
Total	109,670	86,711	117,607	66,049	58,278
Apparent consumption	293,465	239,840	249,661	130,228	132,072

[1] Table includes data for U.S. producers accounting for 100 percent of U.S. ferrosilicon production during this period. Imports include HTS subheadings 7202.21.50.00, 7202.21.75.00, and 7202.21.90.00, and 7202.29.00.50.

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

Figure 3
Ferrosilicon: Apparent U.S. consumption, by sources, 1990-92, Jan.-June 1992, and Jan.-June 1993



Source: Table 2.

Egypt's exports have been primarily off-specification material. In the low-silicon-content market, Egypt exports a byproduct that is the direct result of tapping ferrosilicon from the furnaces and cleaning the buildup from the ladles. The slag produced from tapping the furnaces contains varying degrees of ferrosilicon, with the silicon content taking several forms such as silicon carbide, silicon dioxide, unreduced quartz, and to a lesser degree the desired metallic silicon. Consequently, a large portion of the material does not contain any recoverable silicon and is discarded. Sometimes, the metallic silicon is hidden inside and is only visible after the pieces are crushed. Mixed in with the slag is what the industry characterizes as "rakeouts." Rakeouts refer to the ferrosilicon that adheres to and remains in the ladles when ferrosilicon is poured from the ladle into the molds. The buildup is recovered and then sold to distributor/processors.[51] [52]

In the high-silicon-content category, Egypt has exported ferrosilicon 75, ferrosilicon 65, and off-spec fines. *** percent of Egypt's exports in the high-silicon-content market were ***. *** of its sales in this high-silicon-content market have been ***. As reported by Efaco, the Egyptian producer, it does not produce ferrosilicon 65 intentionally, but rather its production is a result of below-standard furnace operations, raw material problems, and power variations. Thus, the ferrosilicon 65 is not produced to meet certain silicon content ranges, but is merely combined with other off-spec ferrosilicon to form a mixture that as a whole has a silicon content most similar to ferrosilicon 65. ***.

U.S. Producers

Seven companies were identified as producing ferrosilicon during the period January 1990 through June 1993.[53] The Commission sent producer questionnaires to all seven firms and received complete responses from all seven firms. Table 3 presents the names of U.S. producers, the location of manufacturing facilities, each firm's share of reported production in January-June 1993, and the position each firm has taken with respect to the petition. Figure 4 presents the shares of U.S. production accounted for by each producer in the first six months of 1993.

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[51] ***, slag/rakeouts account for about 5 percent of total production of regular grades and 10 percent of high-purity grades. Four U.S. producers have reported sales of slag/rakeouts during the period for which data were collected. American Alloys routinely sold rakeouts to Magnum Metals (Magnum) until early 1992. William Beard, President of American Alloys, states that he learned in 1992 that Magnum had a large stock of Egyptian ferrosilicon on hand, and consequently would not be interested in purchasing from American Alloys. ***. Postconference brief (Feb. 8, 1993), p. 7.

[52] ***.

[53] Three U.S. producers--Glenbrook Nickel, Northwest Alloys, and Silicon Metaltech--produced ferrosilicon during 1989 but discontinued production of ferrosilicon by January 1990.

Table 3
Ferrosilicon: U.S. producers during the period Jan. 1990-June 1993, plant locations, shares of reported production in Jan.-June 1993, and position taken with respect to the petition[1]

Firm	Plant locations	Share of reported production in 1993	Position taken with respect to the petition
AIMCOR	Bridgeport, AL	***	Petitioner
Alabama Silicon	Bessemer, AL	***	Petitioner
American Alloys	New Haven, WV	***	Petitioner
Elkem	Ashtabula, OH Alloy, WV	***	***
Globe.	Beverly, OH	***	Petitioner
Keokuk	Keokuk, IA	***	***
SKW	Niagara Falls, NY Calvert City, KY	***	***

[1] Alabama Silicon, which produced ferrosilicon only for the period April 1990 to December 1991, is a petitioner in this investigation. Silicon Metaltech, which stopped producing ferrosilicon in 1989, is also a petitioner in this investigation.

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

AIMCOR

Applied Industrial Materials Corp. (AIMCOR), of Pittsburgh, PA, ranked as the industry's *** largest producer, accounting for *** percent of U.S. production during the first six months of 1993. AIMCOR produces both ferrosilicon 50 and 75 in one furnace at its Bridgeport, AL, facility. The Bridgeport facility is part of a joint venture agreement with Allegheny Ludlum Steel Corporation (Allegheny Ludlum). Under the terms of the arrangement, Allegheny Ludlum is committed to purchase 25 percent of the ferrosilicon output.[54] AIMCOR shut down its Kimball, TN, plant in February 1987 because of a downturn in the steel industry.[55] The company assessed the possibility of reopening the plant in 1989, but further company analysis showed that the expense of renovating the plant could not be justified in light of existing market conditions. Even though the plant remains closed, the maintenance cost is $100,000 per year.[56]

[54] Conference TR, p. 31.

[55] Conference TR, p. 26.

[56] Conference TR, p. 31.

Figure 4
Ferrosilicon: Share of U.S. production, by producers, Jan.-June 1993

* * * * * * *

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

Alabama Silicon

Alabama Silicon, Inc. started producing ferrosilicon in April 1990 at its plant in Bessemer, AL. The Alabama Alloy Co. had operated the plant until 1981, when it exited the ferrosilicon business reportedly due to difficult market conditions. ***.[57] Since December 1991, Alabama Silicon has not produced ferrosilicon.

American Alloys

American Alloys, Inc., of Pittsburgh, PA, ranked as the industry's *** largest producer, accounting for *** percent of U.S. production during the first six months of 1993. American Alloys produces a range of silicon-based products, including ferrosilicon, silicon metal, and magnesium ferrosilicon, at its New Haven, WV, plant. After Foote Mineral Co. announced its decision to close the plant in 1985, a coalition involving Foote employees and other interested parties conducted a leveraged buy out of the plant to form American Alloys. Operations began in early 1988 with three furnaces producing a wide range of ferrosilicon products.[58] In September 1991, a fourth furnace was commissioned to produce primarily silicon metal.[59]

Elkem

Elkem Metals Co. (Elkem), of Pittsburgh, PA, ranked as the industry's ***, accounting for *** percent of U.S. production during the first six months of 1993. Elkem is a wholly owned subsidiary of Elkem A/S of Norway. ***. Elkem imports from ***.[60]

Globe

Globe Metallurgical, Inc. (Globe), of Cleveland, OH, ranked as the industry's *** largest producer, accounting for *** percent of U.S. production during the first six months of 1993. Globe produces ferrosilicon at its Beverly, OH, plant. ***. Globe produces silicon metal and magnesium ferrosilicon in addition to ferrosilicon.

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[57] ***, telephone conversation, June 15, 1992.

[58] Conference TR, p. 14.

[59] ***, conversation, June 9, 1992.

[60] ***, telephone conversation, June 15, 1992.

Keokuk

Keokuk Ferro-Sil, Inc. (Keokuk), Keokuk, IA, ranked as the industry's *** largest producer, accounting for *** percent of U.S. production during the first six months of 1993. Keokuk was formed in December 1987 when a group of former employees purchased Foote Mineral Co.'s Keokuk, IA, ferrosilicon plant. Foote had announced the closure of the plant in September 1987. Keokuk produces ferrosilicon 50, silvery pig iron, and pulverized silvery pig iron in two furnaces. All production is distributed by Minerais U.S., the sole importer of ferrosilicon produced in Kazakhstan, Russia, and Ukraine.[61]

SKW

SKW Alloys, Inc. (SKW), of Niagara Falls, NY, ranked as the industry's *** largest producer, accounting for *** percent of U.S. production during the first six months of 1993. SKW is a wholly owned subsidiary of SKW Trostberg AG of Germany. SKW operates two plants, one in Niagara Falls, NY, and the other in Calvert City, KY. ***.[62]

U.S. Importers

Questionnaires were sent to 20 firms believed to be importing ferrosilicon from Brazil and Egypt. The Commission received complete and partial responses from 15 of these companies. An additional supplemental questionnaire was sent to nine firms previously identified as importing ferrosilicon from China, Kazakhstan, Russia, Ukraine, and Venezuela. The Commission received complete and partial responses from five of these firms.[63]

According to responses to questionnaires of the Commission, 11 U.S. importers imported ferrosilicon from Brazil during the period January 1990 to June 1993.[64] *** U.S. importers imported from Egypt during the period of investigation.[65] In addition, *** U.S. producers imported ferrosilicon from Brazil during the period January 1990-June 1993.[66] *** also imported small amounts from *** during this period.[67]

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[61] ***. Minerais' postconference brief in Invs. Nos. 731-TA-566 and 569 (Preliminary), exhibit 4, p. 7.

[62] ***, telephone conversation, June 18, 1992.

[63] These firms include: ***.

[64] U.S. importers reporting imports of ferrosilicon from Brazil include: ***.

[65] U.S. importers reporting imports of ferrosilicon from Egypt include: ***.

[66] *** imported ferrosilicon from Brazil during this period. Imports amounted to less than *** short tons in any given year.

[67] ***.

Channels of Distribution

The following tabulation and figures 5 and 6 present the channels of distribution used by U.S. producers and importers of ferrosilicon produced in the United States and imported from Brazil and Egypt in 1992 (in percent):

Item	End users		Distributors	
	Related	Unrelated	Related	Unrelated
Share of U.S. producers' shipments to--	5.6	83.2	1.7	9.5
Share of import shipments from Brazil shipped to--	0.0	82.7	0.0	17.3
Share of import shipments from Egypt shipped to--	***	***	***	***

In the U.S. market, sales of ferrosilicon by U.S. producers and importers of ferrosilicon from Brazil are primarily made to unrelated end users. ***.

* * * * * * *[68] [69] [70]

CONSIDERATION OF ALLEGED MATERIAL INJURY TO AN INDUSTRY IN THE UNITED STATES

Seven firms accounting for 100 percent of U.S. ferrosilicon production during the period January 1990-June 1993 provided responses to the Commission's request for data. A summary of industry data is presented in appendix C.

U.S. Producers' Capacity, Production, and Capacity Utilization

Table 4 and figure 7 present data on U.S. producers' capacity, production, and capacity utilization. U.S. producers' average-of-period capacity to produce ferrosilicon decreased 5.3 percent from 1990 to 1992, but increased 0.6 percent between interim periods. The exit of Alabama Silicon in 1991 contributed to the decline in capacity. Alabama Silicon had produced ferrosilicon for 21 months before shutting down operations at the end of 1991.

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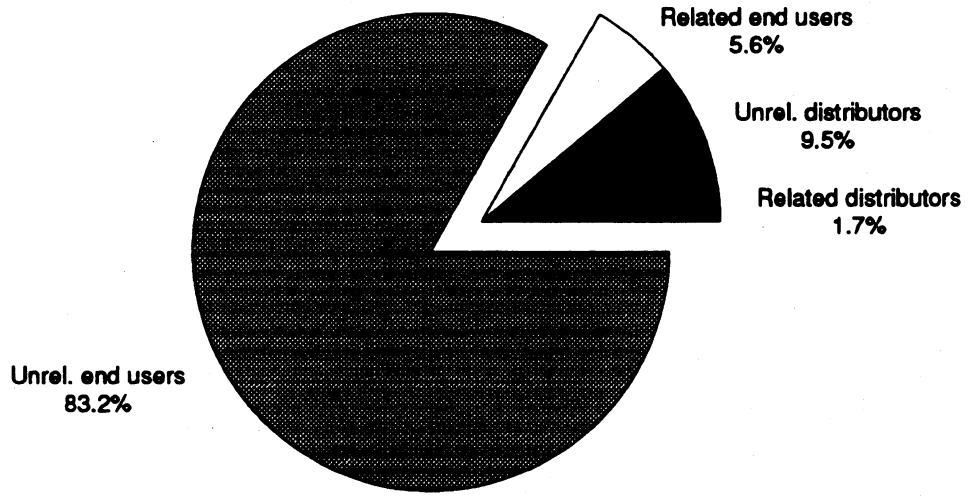
[68] ***. Petitioners' postconference brief (Feb. 8, 1993), p. 7.

[69] ***.

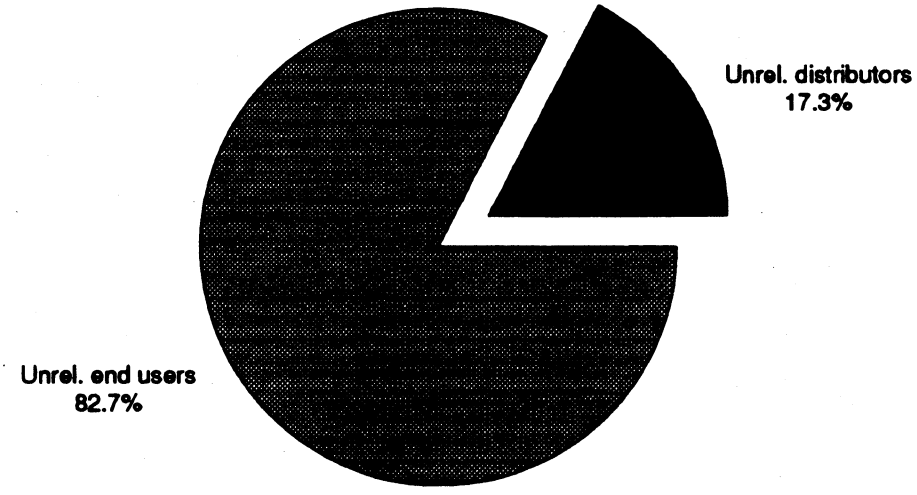
[70] ***, telephone conversations, Jan. 27-28, 1993.

Figure 5
Ferrosilicon: U.S. producers' shipments to distributors and end users, 1992



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

Figure 6
Ferrosilicon: U.S. importers' shipments of imports from Brazil to distributors and end users, 1992



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

Table 4
Ferrosilicon: U.S. capacity, production, and capacity utilization, 1990-92, Jan.-June 1992, and Jan.-June 1993[1]

Item	1990	1991	1992	Jan.-June-- 1992	1993
End-of-period capacity *(silicon-content short tons)*	291,975	277,984	268,185	132,355	133,182
Average-of-period capacity *(silicon-content short tons)*	283,303	275,498	268,210	132,314	133,135
Production *(silicon-content short tons)*	225,011	186,591	172,257	82,208	85,929
End-of-period capacity utilization *(percent)*	77.1	67.1	64.2	62.1	64.5
Average-of-period capacity utilization *(percent)*	78.3	64.8	64.2	62.1	64.5

[1] Table includes data for U.S. producers accounting for 100 percent of U.S. ferrosilicon production during this period.

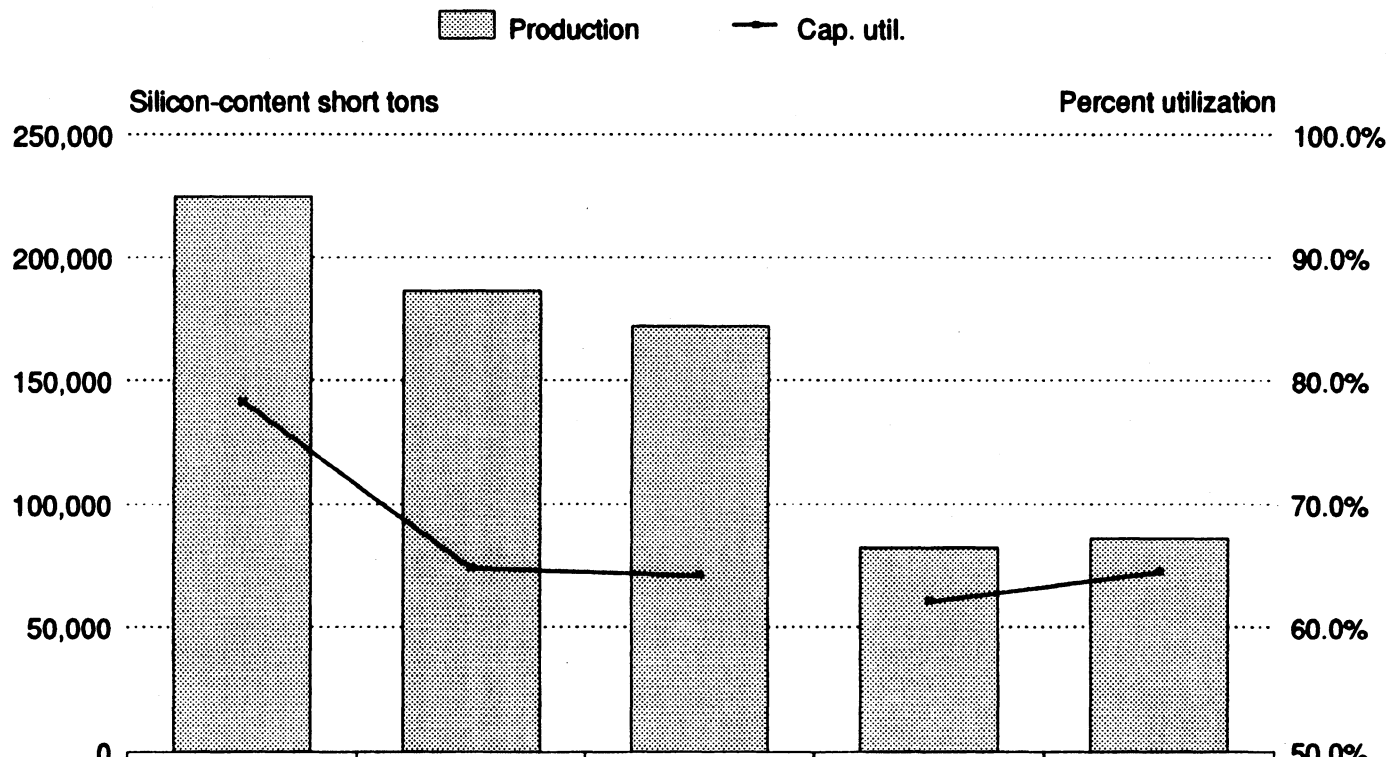
Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

In addition to these exits, *** reduced its capacity to produce ferrosilicon from *** silicon-content short tons to *** silicon-content short tons in 1991 when it switched *** to produce silicon metal. *** was the only firm not to report any disruption of its production of ferrosilicon during the period for which data were collected.[71]

Average-of-period capacity utilization decreased from 78.3 percent in 1990 to 64.8 percent in 1991, and decreased to 64.2 percent in 1992. During the interim periods, capacity utilization increased from 62.1 percent to 64.5 percent.

[71] Keokuk experienced a complete plant shutdown in August 1993 during the flooding of the Des Moines and Mississippi Rivers. Production resumed in mid-September 1993.

Figure 7
Ferrosilicon: Production and average-of-period capacity utilization, 1990-92, Jan.-June 1992, and Jan.-June 1993



	1990	1991	1992	Jan.-Jun. 1992	Jan.-Jun. 1993
Production	225,011	186,591	172,257	82,208	85,929
Cap. util.	78.3%	64.8%	64.2%	62.1%	64.5%

Source: Table 4.

U.S. Producers' Shipments

U.S. Shipments

Table 5 and figure 8 present data on producers' total U.S. shipments of ferrosilicon during the period of investigation. U.S. shipments, based on quantity, decreased 24.1 percent between 1990 and 1992, but increased 11.9 percent between the interim periods.

Table 5
Ferrosilicon: Shipments by U.S. producers, by types, 1990-92, Jan.-June 1992, and Jan.-June 1993[1]

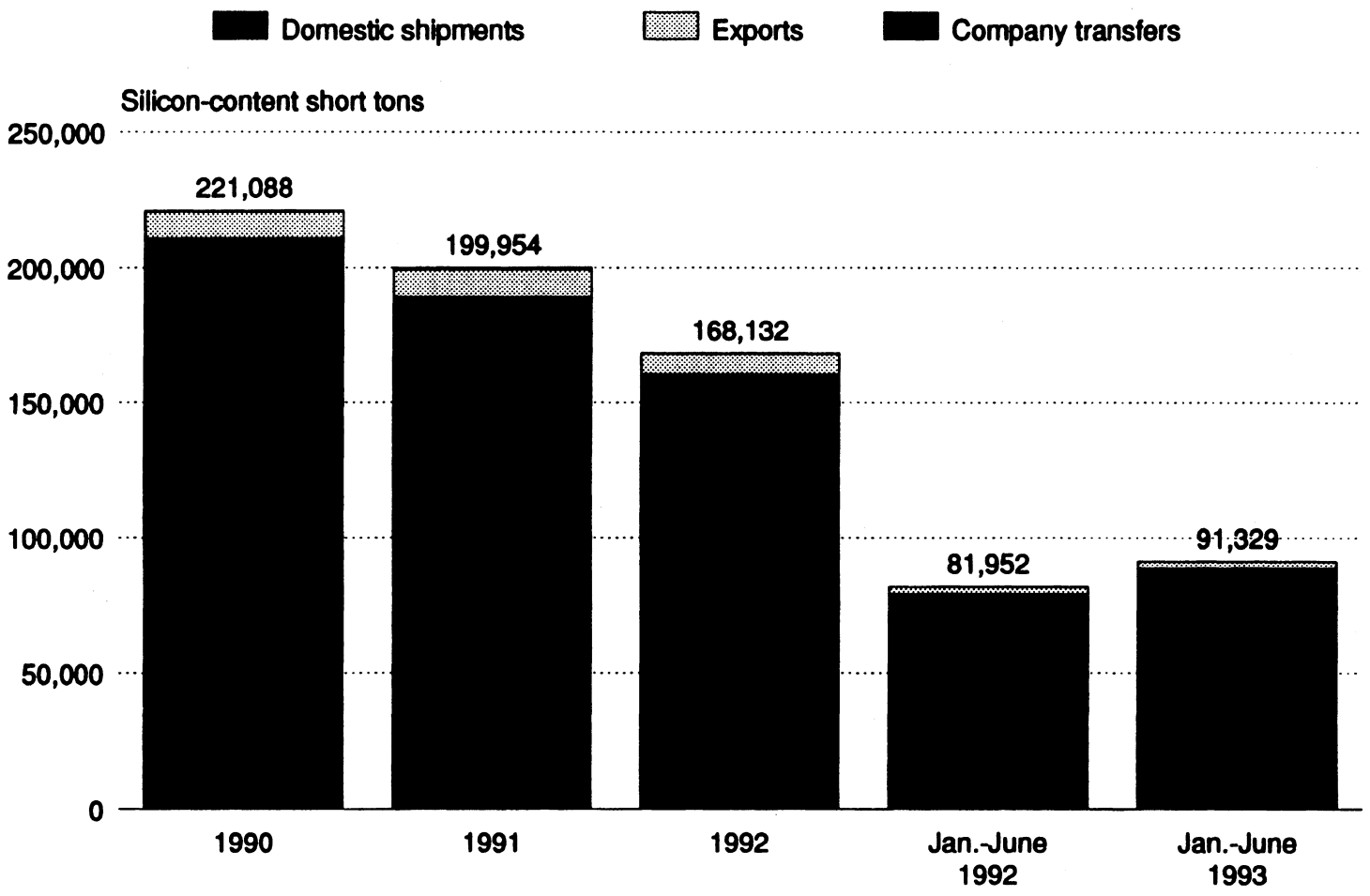
Item	1990	1991	1992	Jan.-June-- 1992	1993
	Quantity *(silicon-content short tons)*				
Company transfers	466	514	126	48	78
Domestic shipments	210,963	189,210	160,378	79,267	88,682
Subtotal	211,429	189,724	160,504	79,315	88,760
Exports	9,659	10,230	7,628	2,637	2,569
Total	221,088	199,954	168,132	81,952	91,329
	Value *(1,000 dollars)*				
Company transfers	354	391	98	36	64
Domestic shipments	183,441	152,738	131,956	64,143	73,730
Subtotal	183,795	153,129	132,054	64,179	73,794
Exports	11,251	10,252	7,361	2,915	2,731
Total	195,046	163,381	139,415	67,094	76,525
	Unit value *(per silicon-content short ton)*				
Company transfers	$760	$761	$778	$750	$821
Domestic shipments	883	843	823	809	831
Average	882	842	823	809	831
Exports	1,424	1,385	965	1,105	1,063
Average	902	864	829	819	838

[1] Table includes data for U.S. producers accounting for 100 percent of U.S. ferrosilicon production during this period.

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

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

Figure 8
Ferrosilicon: Shipments by U.S. producers, by types, 1990-92, Jan.-June 1992, and Jan.-June 1993



Source: Table 5.

Export Shipments

Table 6 presents data on producers' export shipments. Export shipments accounted for 4.4 percent of total shipments in 1990, 5.1 percent in 1991, 4.5 percent in 1992, 3.2 percent in the first six months of 1992, and 2.8 percent in the first six months of 1993. Export shipments, based on quantity, decreased 21.0 percent between 1990 and 1992, and decreased 2.6 percent between the interim periods. U.S. producers' export markets include Australia, Canada, Mexico, Japan, and Europe.

Table 6
Ferrosilicon: Export shipments of U.S. producers, 1990-92, Jan.-June 1992, and Jan.-June 1993[1]

Item	1990	1991	1992	Jan.-June-- 1992	1993
Quantity *(silicon-content short tons)*	9,659	10,230	7,628	2,637	2,569
Value *(1,000 dollars)*	11,251	10,252	7,361	2,915	2,731
Unit value *(per silicon-content short ton)*	$1,424	$1,385	$965	$1,105	$1,063
Share of total shipments--					
Quantity *(percent)*	4.4	5.1	4.5	3.2	2.8
Value *(percent)*	5.8	6.3	5.3	4.3	3.6

[1] Table includes data for U.S. producers accounting for 100 percent of U.S. ferrosilicon production during this period.

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

Total Shipments

Total U.S. producers' shipments of domestically produced ferrosilicon decreased 24.0 percent from 1990 to 1992, but increased 11.4 percent between the interim periods. The value of such shipments decreased 28.5 percent from 1990 to 1992, but increased 14.1 percent between the interim periods.

U.S. Producers' Purchases

Table 7 presents U.S. producers' domestic and import purchases, by sources, during 1990-92, January-June 1992, and January-June 1993. *** U.S. producers purchased ferrosilicon from other domestic producers during the period January 1990-June 1993.[72] *** U.S. producers reported importing ferrosilicon from Brazil during the period January 1990-June 1993.[73] *** imported small quantities of ferrosilicon from *** during this period, while *** imported a small quantity of ferrosilicon from ***.[74]

U.S. Producers' Inventories

Table 8 and figure 9 present data on U.S. producers' end-of-period inventories during the period of investigation. The ratio of U.S. producers' inventories to U.S. shipments increased from 24.0 percent in 1990 to 27.5 percent in 1992, but decreased to 22.9 percent in January-June 1993.

Employment, Wages, and Productivity

The U.S. producers' employment and productivity data are presented in table 9. The number of production and related workers producing ferrosilicon decreased 23.5 percent from 1990 to 1992, but increased 10.9 percent between the interim periods. The number of hours worked by production and related workers producing ferrosilicon decreased 28.9 percent from 1990 to 1992, but increased 16.3 percent between the interim periods.

Total compensation paid to production and related workers by U.S. producers decreased 20.5 percent from 1990 to 1992, but increased 13.0 percent between the interim periods. Hourly total compensation paid to U.S. producers' production and related workers increased from $16.93 in 1990 to $18.64 in 1992. Hourly total compensation decreased from $17.55 in January-June 1992 to $17.20 in the same period of 1993. Productivity of production and related workers increased 4.4 percent from 1990 to 1992, but decreased 10.0 percent between the interim periods.

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[72] ***.

[73] ***.

[74] ***.

Table 7
Ferrosilicon: U.S. producers' domestic and import purchases, by sources, 1990-92, Jan.-June 1992, and Jan.-June 1993[1]

Item	1990	1991	1992	Jan.-June-- 1992	1993
	Quantity *(silicon-content short tons)*				
U.S. importers of product from--					
Brazil	0	0	656	90	1,871
Egypt	0	0	0	0	0
Other sources	2,906	4,897	5,181	6,034	1,025
Total	2,906	4,897	5,837	6,124	2,896
Domestic producers	2,499	2,335	8,410	4,338	2,756
Other sources	0	0	0	0	0
Total	5,405	7,232	14,247	10,462	5,652
	Value *(1,000 dollars)*				
U.S. importers of product from--					
Brazil	0	0	526	70	1,514
Egypt	0	0	0	0	0
Other sources	2,244	3,740	3,721	4,359	762
Total	2,244	3,740	4,247	4,429	2,276
Domestic producers	1,915	1,979	7,458	3,792	2,981
Other sources	0	0	0	0	0
Total	4,159	5,719	11,705	8,221	5,257
	Unit value *(per silicon-content short ton)*				
U.S. importers of product from--					
Brazil	(2)	(2)	$802	$778	$809
Egypt	(2)	(2)	(2)	(2)	(2)
Other sources	772	764	718	722	743
Average	772	764	728	723	786
Domestic producers	766	848	887	874	1,082
Other sources	(2)	(2)	(2)	(2)	(2)
Average	769	791	822	786	930

[1] Table includes data for U.S. producers accounting for 100 percent of U.S. ferrosilicon production during this period.
[2] Not applicable.

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

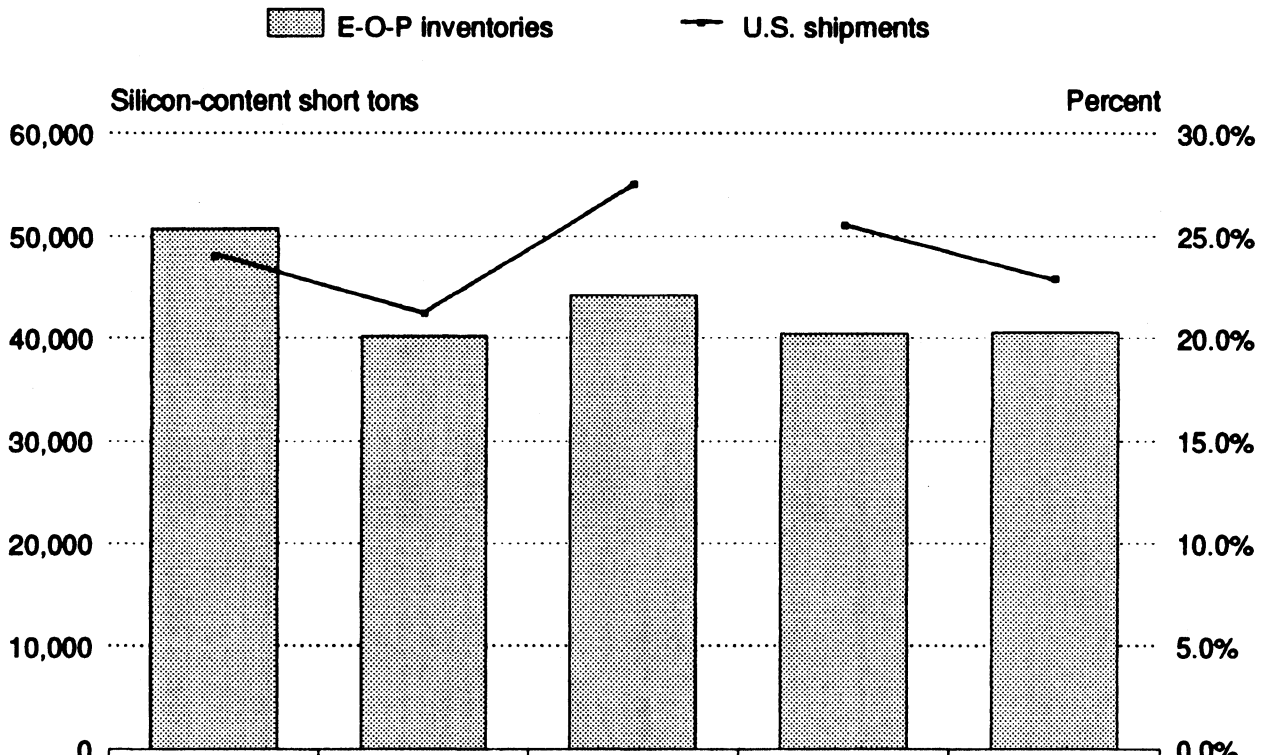
Table 8
Ferrosilicon: End-of-period inventories of U.S. producers, 1990-92, Jan.-June 1992, and Jan.-June 1993

Item	1990	1991	1992	Jan.-June-- 1992	1993
Inventories (*silicon-content short tons*)	50,712	40,177	44,214	40,440	40,598
Ratio of inventories to--					
Production *(percent)*	22.5	21.5	25.7	24.6	23.6
U.S. shipments *(percent)*	24.0	21.2	27.5	25.5	22.9
Total shipments *(percent)*	22.9	20.1	26.3	24.7	22.2

Note.--Part-year inventory ratios are annualized.

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

Figure 9
Ferrosilicon: End-of-period inventories of U.S. producers, and ratio of inventories to U.S. shipments, 1990-92, Jan.-June 1992, and Jan.-June 1993



	1990	1991	1992	Jan.-June 1992	Jan.-June 1993
E-O-P inventories	50,712	40,177	44,214	40,440	40,598
U.S. shipments	24.0%	21.2%	27.5%	25.5%	22.9%

Source: Table 8.

Table 9
Average number of U.S. production and related workers producing ferrosilicon, hours worked,[1] wages and total compensation paid to such employees, and hourly wages, productivity, and unit production costs,[2] 1990-92, Jan.-June 1992, and Jan.-June 1993[3]

Item	1990	1991	1992	Jan.-June-- 1992	1993
Production and related workers	936	779	716	678	752
Hours worked by PRWs *(1,000 hours)*	1,951	1,412	1,387	673	783
Wages paid to PRWs *(1,000 dollars)*	28,521	22,518	24,301	11,189	12,280
Total compensation paid to PRWs *(1,000 dollars)*	35,995	27,376	28,608	13,101	14,799
Hourly wages paid to PRWs	$13.30	$14.16	$15.78	$14.94	$14.20
Hourly total compensation paid to PRWs	$16.93	$17.31	$18.64	$17.55	$17.20
Productivity *(silicon-content short tons per 1,000 hours)*	100.7	112.6	105.1	103.6	93.3
Unit labor costs *(per silicon-content short ton)*	$159.97	$146.72	$166.08	$159.36	$172.22

[1] Includes hours worked plus hours of paid leave time.
[2] On the basis of total compensation paid.
[3] Firms providing employment data accounted for 100 percent of U.S. ferrosilicon production during this period.

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

Financial Experience of U.S. Producers

Six producers of ferrosilicon supplied financial data on overall establishment operations and complete financial data on the production of ferrosilicon.[75] These producers represented 100 percent of U.S. shipments of ferrosilicon in 1992.[76]

Overall Establishment Operations

Income-and-loss data on the overall establishment operations of the six producers are shown in table 10. The percentage of ferrosilicon sales to overall establishment sales steadily declined from about 54 percent in 1990 to 36 percent in 1992 before returning to 39 percent during January-June 1993.

Financial indicators for overall establishment operations declined from 1990 to 1991 before showing some improvement in 1992. Nonetheless, there were operating losses, net losses, and negative cash flow (with the exception of 1990) in each period. Despite modest improvement when comparing interim 1992 data to interim 1993 data, there were continued operating and net losses.

Operations on Ferrosilicon

The financial experience of the ferrosilicon operations of the six producers are presented in tables 11 and 12 and figure 10. The overall results deteriorated each year. Sales quantities declined every year, and by 1992 were about three-quarters of the 1990 sales level. At the same time, unit sales values were declining 3 to 4 percent annually. As a result, net sales values declined about 15 to 20 percent each period, and by 1992 were only about two-thirds the 1990 figure.

There were steadily deepening losses at almost every profit level each year, along with increasingly negative cash flow. Despite the fact that the unit cost of goods sold value decreased every period, by 1992 three of the six producers had losses at the gross profit level.

Interim 1993 results improved somewhat over interim 1992 results, but they were still miserable. Although sales quantities and values both increased about 10 percent and the unit sales value inched upwards, there were still losses at the gross profit level, and operating losses, net losses, and negative cash flow remained large.

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[75] These producers are ***.

[76] The staff verified the data of ***. As a result, income levels for 1992 and 1993 were adjusted significantly upward.

Table 10
Income-and-loss experience of U.S. producers on the overall operations of their establishments wherein ferrosilicon is produced, fiscal years 1990-92, Jan.-June 1992, and Jan.-June 1993[1]

Item	1990	1991	1992	Jan.-June-- 1992	1993
	Value *(1,000 dollars)*				
Net sales	373,805	341,278	384,203	194,892	214,008
Cost of goods sold	362,435	336,993	374,388	191,126	206,416
Gross profit	11,370	4,285	9,815	3,766	7,592
Selling, general, and administrative expenses	19,779	20,518	18,872	9,206	10,173
Operating (loss)	(8,409)	(16,233)	(9,057)	(5,440)	(2,581)
Startup or shutdown expense	2,336	3,865	2,015	959	830
Interest expense	13,168	13,620	11,847	6,356	5,913
Other income or (expense), net	3,772	(3,053)	(34,781)	824	2,131
Net (loss) before income taxes	(20,141)	(36,771)	(57,700)	(11,931)	(7,193)
Depreciation and amortization	21,183	15,545	16,696	8,568	8,513
Cash flow[2]	1,042	(21,226)	(41,004)	(3,363)	1,320
	Ratio to net sales *(percent)*				
Cost of goods sold	97.0	98.7	97.4	98.1	96.5
Gross profit	3.0	1.3	2.6	1.9	3.5
Selling, general, and administrative expenses	5.3	6.0	4.9	4.7	4.8
Operating (loss)	(2.2)	(4.8)	(2.4)	(2.8)	(1.2)
Net (loss) before income taxes	(5.4)	(10.8)	(15.0)	(6.1)	(3.4)
	Number of firms reporting				
Operating losses	3	4	5	5	3
Net losses	5	6	5	5	5
Data	6	6	6	6	6

[1] The companies (and their respective fiscal year ends if other than Dec. 31 are AIMCOR (Sept. 30), American Alloys (Sept. 30), Elkem, Globe (June 30), Keokuk, and SKW.
[2] Cash flow is defined as net income or loss plus depreciation and amortization.

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

Table 11
Income-and-loss experience of U.S. producers on their operations producing ferrosilicon, fiscal years 1990-92, Jan.-June 1992, and Jan.-June 1993[1]

Item	1990	1991	1992	Jan.-June-- 1992	1993
	Quantity *(silicon-content short tons)*				
Net sales[2]	234,221	197,205	173,160	92,275	100,907
	Value *(1,000 dollars)*				
Net sales	203,235	163,487	139,328	74,499	83,353
Cost of goods sold	201,665	167,272	143,052	77,311	83,700
Gross profit or (loss)	1,570	(3,785)	(3,724)	(2,812)	(347)
Selling, general, and administrative expenses	11,426	8,391	8,992	4,430	4,715
Operating (loss)	(9,856)	(12,176)	(12,716)	(7,242)	(5,062)
Startup or shutdown expense	2,165	3,326	1,559	731	614
Interest expense	7,378	8,388	6,344	3,284	2,848
Other income or (expense), net	874	(2,961)	(23,256)	27	1,092
Net (loss) before income taxes	(18,525)	(26,851)	(43,875)	(11,230)	(7,432)
Depreciation and amortization	12,443	7,208	6,778	3,849	3,376
Cash flow[3]	(6,082)	(19,643)	(37,097)	(7,381)	(4,056)
	Value *(per silicon-content short ton)*				
Net sales	$867.71	$829.02	$804.62	$807.36	$826.04
Cost of goods sold	861.00	848.21	826.13	837.83	829.48
Gross profit or (loss)	6.70	(19.19)	(21.51)	(30.47)	(3.44)
Selling, general, and administrative expenses	48.78	42.55	51.93	48.01	46.73
Operating (loss)	(42.08)	(61.74)	(73.43)	(78.48)	(50.17)

Table continued. Footnotes appear at end of table.

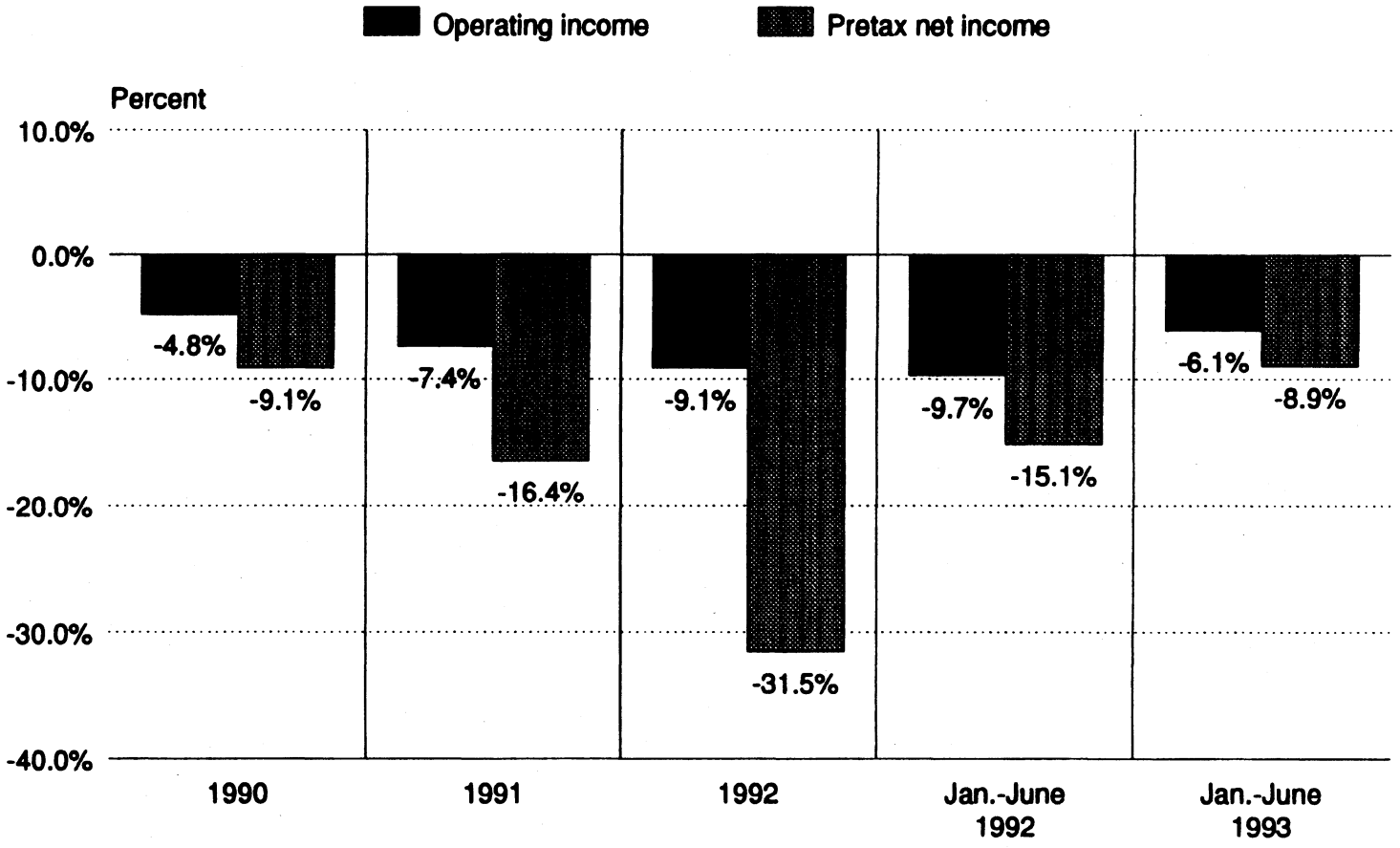
Table 11--*Continued*
Income-and-loss experience of U.S. producers on their operations producing ferrosilicon, fiscal years 1990-92, Jan.-June 1992, and Jan.-June 1993[1]

Item	1990	1991	1992	Jan.-June-- 1992	1993
	Ratio to net sales *(percent)*				
Cost of goods sold	99.2	102.3	102.7	103.8	100.4
Gross profit or (loss)	0.8	(2.3)	(2.7)	(3.8)	(0.4)
Selling, general, and administrative expenses	5.6	5.1	6.5	5.9	5.7
Operating (loss)	(4.8)	(7.4)	(9.1)	(9.7)	(6.1)
Net (loss) before income taxes	(9.1)	(16.4)	(31.5)	(15.1)	(8.9)
	Number of firms reporting				
Operating losses	3	6	6	6	4
Net losses	4	6	6	6	5
Data	6	6	6	6	6

[1] The companies (and their respective fiscal year ends if other than Dec. 31 are ***.
[2] ***.
[3] Cash flow is defined as net income or loss plus depreciation and amortization.

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

Figure 10
Ferrosilicon: Operating income and pretax net income of U.S. producers on their operations producing ferrosilicon as a share of net sales, 1990-92, Jan.-June 1992, and Jan.-June 1993



Source: Table 11.

Table 12
Selected income-and-loss data for U.S. producers on their operations producing ferrosilicon, by firms, fiscal years 1990-92, Jan.-June 1992, and January-June 1993

* * * * * * *

Investment in Productive Facilities and Return on Assets

Data on investment in productive facilities are shown in table 13. Returns on assets are not presented because several producers were not able to allocate establishment assets to ferrosilicon and, therefore, the product assets are somewhat understated. However, all operating income and net income returns on assets would be negative in all periods.

Table 13
Value of assets of U.S. producers' operations producing ferrosilicon, fiscal years 1990-92, Jan.-June 1992, and Jan.-June 1993

(1,000 dollars)

Item	As of the end of fiscal year			As of June 30--	
	1990	1991	1992	1992	1993
All products:					
Fixed assets:					
Original cost	256,279	254,607	266,181	261,201	271,647
Book value	124,250	123,551	112,566	122,843	110,433
Total assets[1]	306,984	293,444	270,671	284,570	256,674
Ferrosilicon:					
Fixed assets:					
Original cost	141,339	135,176	138,215	136,738	147,181
Book value	61,328	57,602	51,681	55,506	51,890
Total assets[2]	148,333	137,324	127,746	130,186	127,163

[1] Defined as book value of fixed assets plus current and noncurrent assets.
[2] Total establishment assets are apportioned, by firm, to product groups on the basis of the ratio of the respective book values of fixed assets.

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

Research and Development Expenses

The research and development (R&D) expenditures of two producers, ***, are shown in table 14. Reported R&D was extremely small in aggregate and as a percentage of sales for these two firms.

Table 14
Research and development expenses of U.S. producers of ferrosilicon, by products, fiscal years 1990-92, Jan.-June 1992, and Jan.-June 1993

* * * * * * *

Capital Expenditures

Capital expenditures of the six producers are shown in table 15. Capital expenditures were small compared to original asset costs and declined over the period of investigation. Capital expenditures were less than depreciation and amortization in every period.

Capital and Investment

The Commission requested the U.S. producers to describe any actual or potential negative effects of imports of ferrosilicon from Brazil and Egypt on their growth, development and production efforts, investment, and ability to raise capital (including efforts to develop a derivative or improved version of their product). Comments from the companies are presented in appendix D.

Table 15
Capital expenditures by U.S. producers of ferrosilicon, by products, fiscal years 1990-92, Jan.-June 1992, and Jan.-June 1993

(1,000 dollars)

Item	1990	1991	1992	Jan.-June-- 1992	1993
All products:					
Land and land improvements	238	452	1,997	305	290
Building and leasehold improvements	252	188	1,058	804	101
Machinery, equipment, and fixtures	13,008	13,922	10,035	4,183	5,326
Total	13,498	14,562	13,090	5,292	5,717
Ferrosilicon:					
Land and land improvements	31	248	1,313	175	290
Building and leasehold improvements	217	113	141	52	101
Machinery, equipment, and fixtures	8,419	5,928	4,304	1,885	2,563
Total	8,667	6,289	5,758	2,112	2,954

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

CONSIDERATION OF THE QUESTION OF THREAT OF MATERIAL INJURY TO AN INDUSTRY IN THE UNITED STATES

Section 771(7)(F)(i) of the Tariff Act of 1930[77] provides that—

In determining whether an industry in the United States is threatened with material injury by reason of imports (or sales for importation) of the merchandise, the Commission shall consider, among other relevant economic factors--[78]

(I) If a subsidy is involved, such information as may be presented to it by the administering authority as to the nature of the subsidy (particularly as to whether the subsidy is an export subsidy inconsistent with the Agreement),

(II) any increase in production capacity or existing unused capacity in the exporting country likely to result in a significant increase in imports of the merchandise to the United States,

(III) any rapid increase in United States market penetration and the likelihood that the penetration will increase to an injurious level,

(IV) the probability that imports of the merchandise will enter the United States at prices that will have a depressing or suppressing effect on domestic prices of the merchandise,

(V) any substantial increase in inventories of the merchandise in the United States,

(VI) the presence of underutilized capacity for producing the merchandise in the exporting country,

(VII) any other demonstrable adverse trends that indicate the probability that the importation (or sale for importation) of the merchandise (whether or not it is actually being imported at the time) will be the cause of actual injury,

(VIII) the potential for product-shifting if production facilities owned or controlled by the foreign manufacturers, which can be used to produce products subject to investigation(s) under section 701 or 731 or to final orders under section 706 or 736, are also used to produce the merchandise under investigation,

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[77] 19 USC § 1677(7)(F)(i).

[78] Section 771(7)(F)(ii) of the act (19 USC § 1677(7)(F)(ii)) provides that "Any determination by the Commission under this title that an industry in the United States is threatened with material injury shall be made on the basis of evidence that the threat of material injury is real and that actual injury is imminent. Such a determination may not be made on the basis of mere conjecture or supposition."

(IX) in any investigation under this title which involves imports of both a raw agricultural product (within the meaning of paragraph (4)(E)(iv)) and any product processed from such raw agricultural product, the likelihood that there will be increased imports, by reason of product shifting, if there is an affirmative determination by the Commission under section 705(b)(1) or 735(b)(1) with respect to either the raw agricultural product or the processed agricultural product (but not both), and

(X) the actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the like product.[79]

Information on the volume, U.S. market penetration, and pricing of imports of the subject merchandise (items (III) and (IV) above) is presented in the section of this report entitled "Consideration of the Causal Relationship Between Imports of the Subject Merchandise and the Alleged Material Injury," and information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts (item (X)) is presented in the section entitled "Consideration of Alleged Material Injury to an Industry in the United States." Available information on U.S. inventories of the subject products (item (V)); foreign producers' operations, including the potential for "product-shifting" (items (II), (VI), and (VIII) above); any other threat indicators, if applicable (item (VII) above); and any dumping in third-country markets, follows. Other threat indicators have not been alleged or are otherwise not applicable.

U.S. Importers' Inventories

U.S. importers' end-of-period inventories of ferrosilicon from Brazil and Egypt are presented in table 16. Fifteen firms reported imports of ferrosilicon from Brazil and Egypt during the period January 1990 to June 1993. The Commission also sent supplementary questionnaires to importers of ferrosilicon from China, Kazakhstan, Ukraine, Russia, and Venezuela. The Commission received inventory data from five importers.[80]

U.S. importers' end-of-period inventories of ferrosilicon from Brazil decreased 85.5 percent from 1990 to 1992, but increased 6.4 percent between the interim periods. ***.

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[79] Section 771(7)(F)(iii) of the Act (19 USC § 1677(7)(F)(iii)) further provides that, in antidumping investigations, ". . . the Commission shall consider whether dumping in the markets of foreign countries (as evidenced by dumping findings or antidumping remedies in other GATT member markets against the same class or kind of merchandise manufactured or exported by the same party as under investigation) suggests a threat of material injury to the domestic industry."

[80] Only end-of-period inventories for ferrosilicon from Venezuela were reported by responding firms. End-of-period inventories of imports from Venezuela were *** short tons as of December 1992, and *** short tons as of June 1993.

Table 16
Ferrosilicon: End-of-period inventories of U.S. importers, by sources, 1990-92, Jan.-June 1992, and Jan.-June 1993[1]

Item	1990	1991	1992	Jan.-June-- 1992	1993
	Quantity *(silicon-content short tons)*				
Brazil	14,574	6,206	2,113	10,055	10,696
Egypt	***	***	***	***	***
	Ratio to imports *(percent)*				
Brazil	51.8	43.2	28.7	32.6	41.3
Egypt	***	***	***	***	***
	Ratio to U.S. shipments of imports *(percent)*				
Brazil	70.8	27.4	34.7	61.4	54.9
Egypt	***	***	***	***	***
	Ratio to total shipments of imports *(percent)*				
Brazil	70.8	27.3	33.4	61.4	54.6
Egypt	***	***	***	***	***

[1] Table includes data for 15 U.S. importers accounting for an estimated 70 percent of U.S. imports from Brazil and Egypt.

Note.--Part-year inventory ratios are annualized.

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

U.S. Importers' Current Orders

*** indicated that it had imported or arranged for importation of ferrosilicon from Brazil since June 30, 1993.[81] No U.S. importers indicated imports or arrangements for importation of ferrosilicon from Egypt since June 30, 1993.

Ability of Foreign Producers to Generate Exports and the Availability of Export Markets other than the United States

The Industry in Brazil

Brazil is the largest ferrosilicon producer in South America and the fourth largest in the world. During the 1980s, an expansion in Brazil's ferrosilicon industry was possible because of a growing domestic steel industry, abundant raw materials, and cheap electricity. However, inadequate state investment in power generation led to the escalation of electricity costs and the rationing of power in the late 1980s. In 1989, electricity was said to account for an average 60 percent of total production costs. At the end of the year, the Brazilian ferroalloy producers' association, Abrafe, was reportedly negotiating with the Mines and Energy Ministry for price concessions on surplus hydroelectricity in Brazil's rainy season.

In the early 1990s, the difficulties facing Brazil's ferroalloy industry were compounded as Brazil went into an economic downturn. As a result of the domestic economic reforms and poor demand for ferroalloys worldwide, Brazil's industry suffered a major slump in 1990 after a decade of uninterrupted growth.

Six Brazilian ferrosilicon producers, accounting for an estimated 95 percent of Brazilian production and 100 percent of Brazilian exports to the United States, supplied the Commission with information on production, capacity, and shipments (table 17).[82]

According to the data submitted by the Brazilian producers, exports accounted for 72.2 percent of total shipments in 1990, 69.0 percent in 1991, 72.6 percent in 1992, 71.6 percent in January-June 1992, and 72.0 percent in January-June 1993. Exports to the United States accounted for 23.1 percent of total shipments in 1990, 12.6 percent in 1991, 36.2 percent in 1992, 29.4 percent in January-June 1992, and 28.3 percent in January-June 1993. In addition to the United States, Brazil's major export markets include Europe, Japan, Asia, and the Middle East.

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[81] ***.

[82] These six firms and their share of Brazilian exports to the United States are: Minasligas (*** percent), Italmagnesio (*** percent), Libra (*** percent), Rima Electrometalurgia (*** percent), Ferbrasa (*** percent), and CBCC (*** percent).

Table 17
Ferrosilicon: Brazil's production capacity, production, shipments, and end-of-period inventories, 1990-92, Jan.-June 1992, Jan.-June 1993, and projections for 1993 and 1994[1]

(Silicon-content short tons)

Item	1990	1991	1992	Jan.-June 1992	Jan.-June 1993	Projected 1993	Projected 1994
Production capacity	194,383	225,838	231,838	115,919	115,919	231,838	219,838
Production	144,095	135,373	196,966	90,330	94,153	199,732	194,650
Capacity utilization	74.1	59.9	85.0	77.9	81.2	86.2	88.5
Shipments:							
Home market	42,111	45,679	52,997	26,896	28,906	58,796	63,417
Exports to--							
United States	34,929	18,592	70,180	27,827	29,096	32,485	26,500
All other markets[2]	74,502	83,287	70,624	39,951	45,079	113,403	113,617
Subtotal	109,431	101,879	140,804	67,778	74,175	145,888	140,117
Total shipments	151,542	147,558	193,801	94,674	103,081	204,684	203,534
End-of-period inventories	35,418	25,178	26,756	19,671	18,900	21,504	12,419

[1] Table includes data for six Brazilian producers accounting for an estimated 95 percent of ferrosilicon production in Brazil during 1992.
[2] Other principal export markets include Japan, Asia, the Middle East, and Europe.

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

The Industry in Egypt

Two firms, Efaco and Kimi, have produced ferrosilicon in Egypt during the period for which data were collected. Efaco accounts for 100 percent of total exports to the United States. ***. Efaco commissioned a fourth furnace in the first quarter of 1990, which accounted for a *** percent increase in production capacity. Table 18 presents Efaco's trade data.

Exports accounted for *** percent of total shipments in 1990, *** percent in 1991, *** percent in 1992, *** percent in January-June 1992, and *** percent in January-June 1993. Exports to the United States accounted for *** percent of total shipments in 1990, *** percent in 1991, *** percent in 1992, *** percent in January-June 1992, and *** percent in January-June 1993. There were no exports to the United States in 1991 or interim 1993. Egypt's major export markets include Europe, Japan, Asia, and the Middle East.

Table 18
Ferrosilicon: Egypt's production capacity, production, shipments, and end-of-period inventories, 1990-92, Jan.-June 1992, Jan.-June 1993, and projections for 1993 and 1994

* * * * * * *

European Community and Japanese Antidumping Investigations

On December 14, 1992, the Council of the European Community (EC) imposed a definitive antidumping duty of 32 percent on imports of ferrosilicon from Egypt. However, Efaco, the sole exporter of ferrosilicon to the United States, is not subject to the duty because it entered into a price undertaking with the EC. The terms of the undertaking state the Efaco may not sell ferrosilicon 75 to the EC at a price lower than ECU 590 ($694.43) per metric ton.

As of May 1991, following the initiation of antidumping investigations by the EC concerning ferrosilicon from Brazil, China, Georgia, Iceland, Kazakhstan, Norway, Russia, South Africa, Sweden, Ukraine, Venezuela, and six of the former Yugoslav republics, agreements were reached with most of these countries to limit imports of ferrosilicon. Japan also has antidumping investigations involving ferrosilicon from Norway and South Africa.

CONSIDERATION OF THE CAUSAL RELATIONSHIP BETWEEN IMPORTS OF THE SUBJECT MERCHANDISE AND THE ALLEGED MATERIAL INJURY

U.S. Imports

In the course of these final investigations, questionnaires were received from 15 firms importing ferrosilicon from Brazil and Egypt. These responses are believed to account for an estimated 70 percent of U.S. imports from these countries. However, in order to present complete import coverage, official import statistics from Commerce have been used throughout this section and the entire report. Table 19 and figure 11 present U.S. imports, by sources, for the periods 1990-92, January-June 1992, and January-June 1993.

Table 19
Ferrosilicon: U.S. imports, by sources, 1990-92, Jan.-June 1992, and Jan.-June 1993[1]

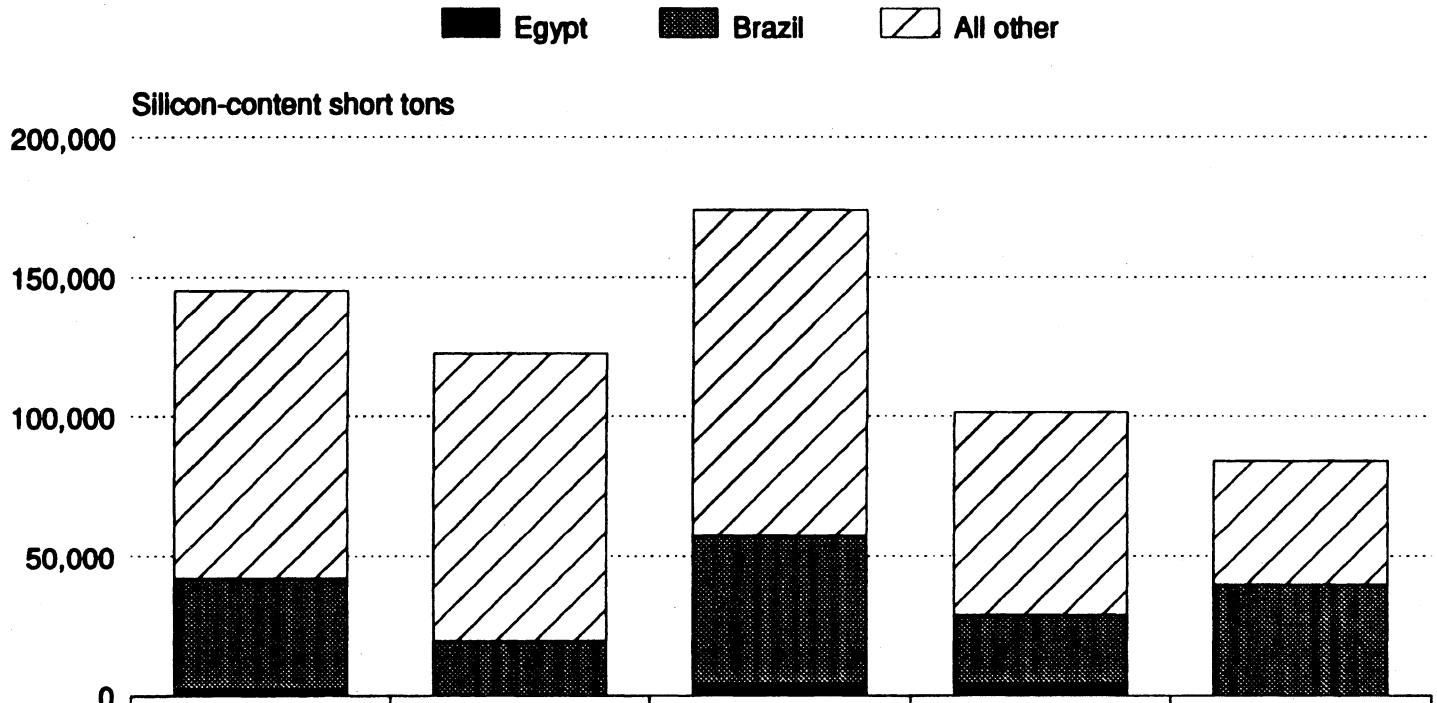
Item	1990	1991	1992	Jan.-June-- 1992	1993
	Quantity *(silicon-content short tons)*				
Brazil	40,010	19,259	52,994	24,474	39,760
Egypt	2,085	0	4,292	4,292	0
Subtotal	42,095	19,259	57,286	28,766	39,760
China	3,324	3,324	2,716	0	14
Former U.S.S.R	18,578	17,710	33,687	33,687	0
Venezuela	25,708	32,969	25,793	14,867	8,288
Subtotal	89,705	73,262	119,483	77,320	48,062
Other sources	55,413	49,220	54,549	24,107	35,944
Total	145,118	122,481	174,032	101,427	84,006
	Value *(1,000 dollars)*				
Brazil	30,874	11,454	34,232	15,028	25,433
Egypt	2,556	0	2,008	2,008	0
Subtotal	33,430	11,454	36,239	17,036	25,433
China	2,010	2,442	1,722	0	57
Former U.S.S.R	14,363	12,485	22,299	22,299	0
Venezuela	15,416	20,964	15,083	8,459	4,952
Subtotal	65,219	47,345	75,343	47,794	30,443
Other sources	44,451	39,366	42,264	18,255	27,836
Total	109,670	86,711	117,607	66,049	58,278
	Unit value *(per silicon-content short ton)*				
Brazil	$772	$595	$646	$614	$640
Egypt	1,226	(2)	468	468	(2)
Average	794	595	633	592	640
China	605	735	634	(1)	4,056
Former U.S.S.R	773	705	662	662	(2)
Venezuela	600	636	585	569	597
Average	727	646	631	618	633
Other sources	802	800	775	757	774
Average	756	708	676	651	694

[1] Imports include HTS subheadings 7202.21.50.00, 7202.21.75.00, and 7202.21.90.00, and 7202.29.00.50.
[2] Not applicable.

Note.--Because of rounding, figures may not add to the totals shown; unit values are calculated from unrounded figures.

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

Figure 11
Ferrosilicon: U.S. imports, by sources, 1990-92, Jan.-June 1992, and Jan.-June 1993



	1990	1991	1992	Jan.-June 1992	Jan.-June 1993
All other	103,023	103,222	116,746	72,661	44,246
Brazil	40,010	19,259	52,994	24,474	39,760
Egypt	2,085	0	4,292	4,292	0

Source: Table 19.

Brazil

The quantity of imports of ferrosilicon from Brazil increased 32.5 percent from 1990 to 1992, and increased 62.5 percent between the interim periods. The value of imports of ferrosilicon from Brazil increased 10.9 percent from 1990 to 1992, and increased 69.2 percent between the interim periods.

Egypt

Since January 1990, there have been only three shipments of ferrosilicon from Egypt,[83] Imports from Egypt were reported in 1990 and 1992. There were no imports from Egypt in 1991 or anticipated shipments in 1993.

U.S. Producers' Imports

Three U.S. producers imported ferrosilicon from Brazil during the period January 1990 to June 1993.[84]

Market Penetration by the Subject Imports

The market shares of U.S. producers and imports from Brazil, Egypt, and selected other sources, based on apparent U.S. consumption, are presented in table 20 and figure 12.

U.S. producers' market share, based on the quantity of apparent U.S. consumption, increased from 59.3 percent in 1990 to 60.8 in 1991, but decreased to 48.0 percent in 1992. During the interim periods, U.S. producers' market share increased from 43.9 percent to 51.4 percent.

The market share of imports from Brazil, based on the quantity of apparent U.S. consumption, decreased from 11.2 percent in 1990 to 6.2 in 1991, but increased to 15.8 percent in 1992. During the interim periods, the market share of imports from Brazil increased from 13.5 percent to 23.0 percent.

The market share of imports from Egypt, based on the quantity of apparent U.S. consumption, decreased from 0.6 percent in 1990 to 0.0 percent in 1991, but increased to 1.3 percent in 1992. During the interim periods, the market share of imports from Egypt decreased from 2.4 percent to 0.0 percent.

The aggregated market share of imports from China, Venezuela, Russia, Ukraine, and Kazakhstan, based on the quantity of apparent U.S. consumption, increased from 13.4 percent in 1990 to 17.3 percent in 1991, and increased to 18.6 percent in 1992. During the interim periods, the market share of these imports dropped dramatically from 26.9 percent to 4.8 percent following the imposition of antidumping orders on imports from these countries.

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[83] ***.

[84] ***.

Table 20
Ferrosilicon: Shares of apparent U.S. consumption based on U.S. shipments of domestic product and imports, by sources, 1990-92, Jan.-June 1992, and Jan.-June 1993[1]

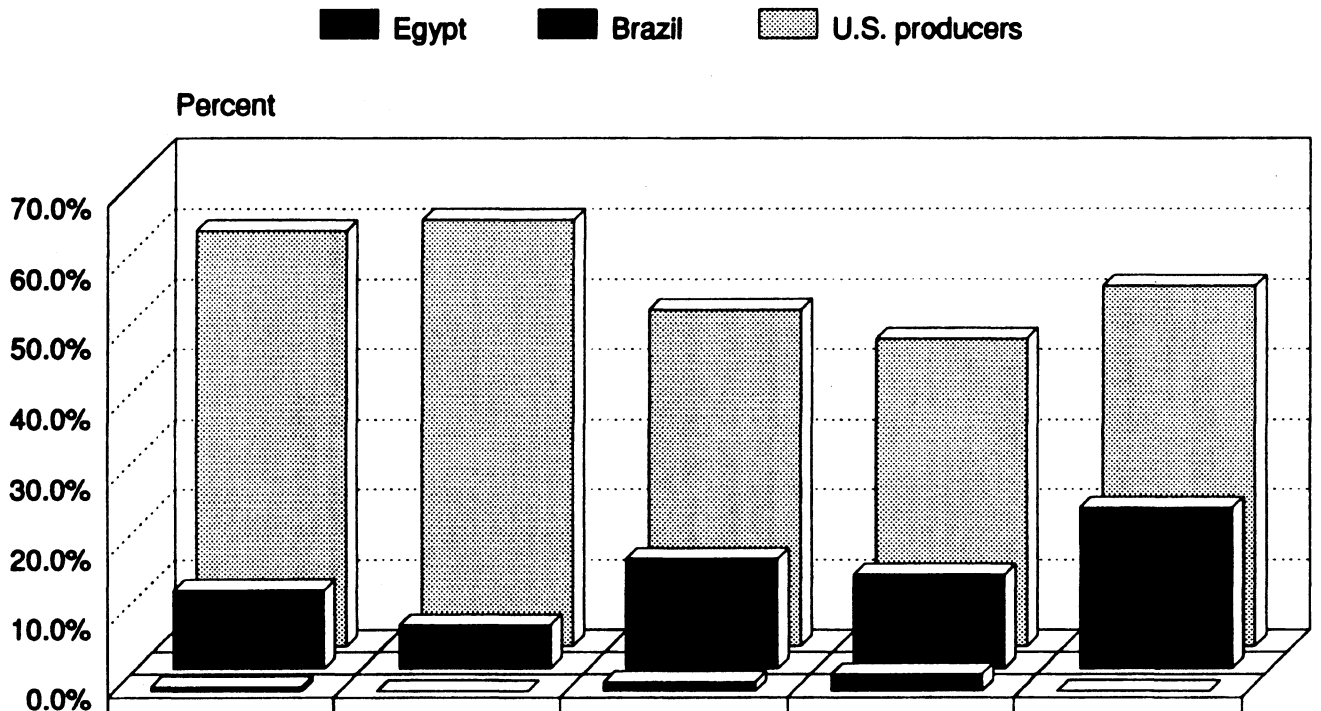
Item	1990	1991	1992	Jan.-June-- 1992	1993
	Share of the quantity of U.S. consumption *(percent)*				
Producers' U.S. shipments	59.3	60.8	48.0	43.9	51.4
U.S. imports from--					
Brazil	11.2	6.2	15.8	13.5	23.0
Egypt	.6	0	1.3	2.4	0
Subtotal	11.8	6.2	17.1	15.9	23.0
China	.9	1.1	.8	0	(2)
Former U.S.S.R	5.2	5.7	10.1	18.6	0
Venezuela	7.2	10.6	7.7	8.2	4.8
Subtotal	25.2	23.5	35.7	42.8	27.8
Other sources	15.5	15.8	16.3	13.3	20.8
Total	40.7	39.2	52.0	56.1	48.6
	Share of the value of U.S. consumption *(percent)*				
Producers' U.S. shipments	62.6	63.8	52.9	49.3	55.9
U.S. imports from--					
Brazil	10.5	4.8	13.7	11.5	19.3
Egypt	.9	0	.8	1.5	0
Subtotal	11.4	4.8	14.5	13.1	19.3
China	.7	1.0	.7	0	(2)
Former U.S.S.R	4.9	5.2	8.9	17.1	0
Venezuela	5.3	8.7	6.0	6.5	3.7
Subtotal	22.2	19.7	30.2	36.7	23.1
Other sources	15.1	16.4	16.9	14.0	21.1
Total	37.4	36.2	47.1	50.7	44.1

[1] Table includes data for U.S. producers accounting for 100 percent of U.S. ferrosilicon production during this period. Imports include HTS subheadings 7202.21.50.00, 7202.21.75.00, and 7202.21.90.00, and 7202.29.00.50.
[2] Less than 0.05 percent.

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

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

Figure 12
Ferrosilicon: Share of the quantity of U.S. consumption, by sources, 1990-92, Jan.-June 1992, and Jan.-June 1993



	1990	1991	1992	Jan.-June 1992	Jan.-June 1993
U.S. producers	59.3%	60.8%	48.0%	43.9%	51.4%
Brazil	11.2%	6.2%	15.8%	13.5%	23.0%
Egypt	0.6%	0.0%	1.3%	2.4%	0.0%

Source: Table 20.

The aggregated market share of imports from Brazil, Egypt, China, Venezuela, Russia, Ukraine, and Kazakhstan, based on the quantity of apparent U.S. consumption, decreased from 25.2 percent in 1990 to 23.5 percent in 1991, and increased to 35.7 percent in 1992. During the interim periods, the market share from these sources decreased from 42.8 percent to 27.8 percent.

The market share of imports from all other sources, based on the quantity of apparent U.S. consumption, increased from 15.5 percent in 1990 to 15.8 percent in 1991 and 16.3 percent in 1992. During the interim periods, the market share of all other sources increased from 13.3 percent to 20.8 percent.

Prices

Market Characteristics[85]

U.S. producers sell ferrosilicon almost exclusively to steel producers and iron foundries. U.S. importers sell the ferrosilicon from Brazil almost exclusively to steel producers, and the ferrosilicon from Egypt to processors.[86] U.S. sales of the domestic and imported Brazilian ferrosilicon are transacted most frequently on a quarterly/semiannual requirement sales basis.[87] U.S. importers of the Egyptian ferrosilicon reported selling the imported products on a spot basis; there have been only three import shipments of ferrosilicon from Egypt between January 1990 and September 1992–two in 1990 and one in 1992.

Product Comparisons

The Commission requested U.S. producers, importers, and purchasers to discuss any differences between the domestic and subject imported ferrosilicon that would explain differences in prices. Comments concerning imports of ferrosilicon from Brazil and Egypt are discussed below by the subject foreign countries.

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[85] For a more detailed discussion of the market characteristics and transportation and packaging costs of the U.S. ferrosilicon industry, see the sections entitled "Market Characteristics" and "Transportation and Packaging" in the report for investigations Nos. 731-TA-461-462 (Preliminary).

[86] As discussed earlier, the imported Egyptian ferrosilicon is mostly off-grade material that must be further processed or combined with other ferrosilicon before it can be sold to U.S. end users.

[87] Based on producer and importer (excluding Egypt) questionnaire responses for 1992, U.S. sales distribution data by type of sale show that quarterly/ semiannual requirement sales accounted for 54.4 percent of total sales of the domestic ferrosilicon and *** percent of 1992 total sales of the imported Brazilian ferrosilicon. Spot sales accounted for 21.0 percent of sales of the domestic products and *** percent of sales of the Brazilian imported products during this period, while long-term contracts (agreements to supply ferrosilicon for a period exceeding 6 months) accounted for 24.6 percent of sales of the domestic products; ***.

Brazil

Six U.S. ferrosilicon producers and nine importers commented on the imported Brazilian ferrosilicon.[88] The U.S. producers indicated that there was no discernible difference in quality between the domestic and imported Brazilian commodity-grade ferrosilicon. One of the U.S. producers, ***, noted, however, that U.S. producers may have a slight advantage over suppliers of the Brazilian product by offering a more reliable supply and a wider range of products, although the firm did not see a significant price premium resulting from these advantages. Another U.S. producer, ***, felt U.S. producers had some advantage over suppliers of the Brazilian ferrosilicon by offering special packaging and supplying small quantities.

The reporting importers felt that the Brazilian ferrosilicon was generally comparable to the U.S. product in quality. Three of the importers, ***, cited low levels of aluminum, carbon, chrome, and magnesium in the Brazilian ferrosilicon that they felt made the chemistry of the Brazilian product attractive to steel producers and iron foundries.[89] Three other importers, ***, cited spotty availability, a long supply line, and excessive fines associated with the Brazilian product, making it somewhat less desirable than the domestic product. *** also indicated that they had to screen the imported product in the United States to sell specific sizes and to remove excessive fines that resulted from extensive handling of the product.[90]

Most of the responding purchasers indicated that differences in the quality of U.S.-produced ferrosilicon and imported Brazilian commodity products were not significant. Eleven of the 12 responding purchasers reported that the quality of U.S.-produced and imported Brazilian ferrosilicon was comparable.[91] Six of the 13 responding purchasers reported that they did not usually know the country of origin of the product that they import. Eleven of the 12 responding purchasers stated that they would not be willing to pay a price premium for domestic ferrosilicon. One purchaser, ***, reported that it bought higher priced U.S.-produced ferrosilicon because it wanted multiple supply sources in order to avoid supply disruptions. Three of the responding purchasers reported that they always go with the lowest bid of qualified suppliers, regardless of country of origin.[92]

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[88] Importers reported importing primarily ferrosilicon 75 from Brazil, but also reported importing some ferrosilicon 50.

[89] *** indicated that the Brazilian ferrosilicon producers use high quality quartzite and charcoal instead of coal/coke to make a low-impurity ferrosilicon.

[90] Based on their questionnaire responses, *** together screened in the United States about *** percent of total U.S. shipments of the imported Brazilian ferrosilicon between January 1989 and September 1992. The screening costs added an average of about *** per pound of silicon content to the U.S. selling price of the imported ferrosilicon. The *** reported share of import shipments that were screened and the *** additional cost of screening in the United States suggests that U.S. screening costs had *** impact on U.S. selling prices of the ferrosilicon imported from Brazil.

[91] One purchaser, ***, reported that the quality of the imported Brazilian ferrosilicon was superior to that of the domestic product.

[92] ***.

Egypt

Six U.S. ferrosilicon producers and 3 importers commented on the quality of the imported Egyptian ferrosilicon. All of the U.S. producers stated that there were no discernible differences between the quality of the domestic and imported Egyptian commodity-grade products. One of the importers, ***, indicated that the Egyptian ferrosilicon 65 comes in unsized lumps (up to 16 inches) and the crushing to size in the United States results in about 25 percent of the material being reduced to fines. In addition, *** claims that the Egyptian ferrosilicon 65 requires a price discount because of a high (0.2 percent) carbon level. A second responding importer, ***, asserted that most of the Egyptian imports are off-grade and by-product ferrosilicon, which are not offered by U.S. ferrosilicon producers. The third responding importer, ***, indicated that it imported Egyptian ferrosilicon that was slag and off-specification ferrosilicon 65, which the importer sold to U.S. processors.

One U.S. purchaser of the imported Egyptian ferrosilicon, ***, commented on the quality of the imported material. According to ***.[93]

Questionnaire Price Data

The Commission requested U.S. quarterly pricing data for bulk shipments of three representative ferrosilicon products.[94] The specified products are described below:

PRODUCT 1: **Regular (commodity) grade 75-percent ferrosilicon.**--Ferrosilicon containing by weight 74.0 to 79.0 percent silicon; 0.10 percent or less carbon; 0.025 percent or less sulfur; 0.035 percent or less phosphorous; 1.50 percent or less aluminum; and 0.40 percent or less manganese.

PRODUCT 2: **Regular (commodity) grade 50-percent ferrosilicon.**--Ferrosilicon containing by weight 47.0 to 51.0 percent silicon; 0.10 percent or less carbon; 0.025 percent or less sulfur; 0.040 percent or less phosphorous; 1.25 percent or less aluminum; and 0.75 percent or less manganese.

PRODUCT 3: **Grade 65 percent ferrosilicon.**--Ferrosilicon containing by weight approximately 65 percent silicon and sold as such, whether produced specifically to that specification or incidentally meeting that specification.

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[93] Telephone conversations with ***, Jan. 27-28, 1993.

[94] Petitioners, importers, and end users indicated to the Commission during the preparation of questionnaires for the final ferrosilicon investigations that the specified products shipped in bulk constitute a significant portion of the U.S. ferrosilicon market and capture the majority of competition between the domestic and subject imported ferrosilicon (***). Quarterly pricing data on imports of ferrosilicon from Venezuela for the period Oct. 1993-June 1993 are presented in app. E.

During the current final investigations, the Commission requested U.S. producers and importers to provide U.S. quarterly selling price data for products 1-3 shipped to steel producers and product 2 shipped to iron foundries, on a quarterly/semiannual requirement sales basis, between January 1990 and June 1993.[95] The price data were requested on net weighted-average U.S. f.o.b. and delivered bases for the firms' total quarterly shipments to each of the specified types of end users.

Six domestic producers and eight importers provided the Commission with usable selling price data for at least one of the products and part of the period requested. The responding U.S. producers provided price information for products accounting for 33.6 percent of the total quantity of domestic shipments of U.S.-produced ferrosilicon between January 1990 and June 1993.[96] The responding U.S. importers provided price information for products accounting for 39.1 percent of the total quantity of reported U.S. shipments of imports of ferrosilicon from Brazil[97] and *** percent from Egypt[98] during this period.

U.S. producers reported that Statistical Process Control (SPC) documentation was required on 8.8 percent of their sales of the commodity-grade ferrosilicon for which they reported price data during January-June 1993. U.S. importers reported that all of their U.S. sales of the subject imported ferrosilicon were to U.S. purchasers that did not require them to supply SPC documentation.

The Commission also requested both end users and distributors to provide total quarterly delivered purchase prices and quantities for the specified ferrosilicon products shipped, on a quarterly/semiannual requirement sales basis, to their U.S. locations between January 1992 and June 1993. The quarterly price data were requested on a net weighted-average U.S.-delivered basis for total quarterly shipments of the specified products.

The Commission sent purchaser questionnaires to 50 large ferrosilicon buyers as reported by U.S. producers and importers of ferrosilicon. Ten of these firms provided price data for purchases of U.S.-produced products 1-3 and 10 for purchases of imported Brazilian products 1 and 2. None of the responding firms reported any price data for purchases of imported Egyptian ferrosilicon.

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[95] Iron foundries tend to pay a higher price for ferrosilicon of the same silicon content and grade as that used by steel producers because foundries typically use smaller volumes of ferrosilicon than steel producing firms. Therefore, separate price series were requested for sales of the commodity grade ferrosilicon 50 to steel producers and iron foundries.

[96] The U.S. producers reported price data for shipments of product 1 (commodity grade ferrosilicon 75) to steel producers, product 2 (commodity grade ferrosilicon 50) to steel producers and to iron foundries, and product 3 (ferrosilicon 65). Sales of the domestic product 1 to steel producers accounted for 17.2 percent of the total quantity of ferrosilicon for which U.S. producers reported price data, while sales of product 2 to steel producers accounted for 51.0 percent and sales of product 2 to iron foundries accounted for 25.1 percent. Sales of domestic product 3 to steel producers accounted for 6.7 percent of the reported price data.

[97] Eight U.S. importers reported price data for the Brazilian product 1 shipped to steel producers.

[98] ***.

Price trends

Price trends were based on net weighted-average quarterly U.S. f.o.b. selling prices of ferrosilicon reported by U.S. producers and importers in their questionnaire responses. Price trends of the domestic products are shown for all three sales categories. Price trends of the Brazilian imported products are shown for only product 1 sold to steel producers; too few sales of the imported product 2 sold to steel producers or iron foundries were reported to develop meaningful price trends. Too few sales of the imported Egyptian ferrosilicon were reported to develop meaningful price trends.

Quarterly prices of the domestic and imported Brazilian products generally fell to their lowest points in the first or second quarters of 1992, then recovered during the rest of the period. Long-run price trends suggest that ferrosilicon prices were close to an historic high in 1989. In 1988 the average U.S. price of imported ferrosilicon 75, as reported by *Metals Week*, reached its highest level for the 1980s and,[99] although this price decreased by 14 percent in 1989, the price in 1989 was still substantially higher than the prices reported for the 6 years prior to 1988.[100] The *Metals Week* price for imported ferrosilicon 75 fell an additional 19 percent in 1990, and 8 percent in 1991; the period-average price of ferrosilicon 75 during January-September 1992 was 8 percent below the price for the comparable period in 1991.[101]

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[99] *Metals Week* publishes weekly the U.S. f.o.b. selling price ranges of imported commodity grades ferrosilicon 75 and ferrosilicon 50 based on a combination of quarterly-requirement sales and spot sales to end users, primarily steel producers. The firm determines the price ranges based on ***. Mr. Patrick Ryan, the editor and reporter of ferrosilicon pricing for *Metals Week*, indicated that his firm does not publish a current price of U.S.-produced ferrosilicon, because ***. But Mr. Ryan noted that the information he obtains from end users and traders regarding U.S. producers' prices indicates that prices of domestic ferrosilicon are within the ranges of prices reported for imported products. (Telephone conversation with Patrick Ryan on Dec. 9, 1992.)

Some U.S. producers indicated in their questionnaire responses that the *Metals Week* prices of only imported ferrosilicon tend to report the lower end of the price spectrum for the U.S. ferrosilicon market, thereby suppressing market prices as buyers and sellers use the *Metals Week* prices in their price negotiations.

[100] Average annual prices of imported ferrosilicon 75 calculated from the midpoints of the weekly *Metals Week* price ranges fluctuated but rose from $0.3802 per pound of silicon content in 1982 to a peak of $0.5675 per pound during 1988. In 1989, ferrosilicon prices averaged $0.4907 per pound, the second highest level since 1982.

[101] *Metals Week* prices of imported ferrosilicon 50 during 1982-92 followed a similar trend as that for the imported ferrosilicon 75 during this period.

United States.--Net weighted-average quarterly U.S. f.o.b. prices and shipment quantities of the specified U.S.-produced ferrosilicon products are shown in table 21 and figures 13-15. The U.S. producers' average price for product 1 (commodity grade ferrosilicon 75) sold to steel producers increased by 7.2 percent to its highest point in the third quarter of 1990, fluctuated downward by 18.7 percent to its lowest point in the first quarter of 1992, then increased by *** percent during the rest of the period. Overall, product 1 prices were *** percent lower in the second quarter of 1993 than they were in the first quarter of 1990.

The product 2 price trends were similar to the product 1 price trend. Prices for product 2 sold to steel producers increased by 3.2 percent to their highest point in the third quarter of 1990, fluctuated downward by 16.7 percent to their lowest point in the second quarter of 1992, then increased by 13.2 percent during the rest of the period. Overall, prices for product 2 sold to steel producers were 2.6 percent lower in the second quarter of 1993 than they were in the first quarter of 1990.

Prices for U.S.-produced product 2 sold to iron foundries fluctuated downward during the investigation period. Prices for product 2 sold to iron foundries fluctuated between $0.3998 and $0.3975 per pound of silicon content during 1990, between $0.3992 and $0.3935 during 1991, and between $0.3927 and $0.3781 during 1992. Over the entire period, prices fell by 0.8 percent.

The limited price data for U.S.-produced product 3 sold to steel producers similarly showed prices falling ***, then fluctuating upward during the rest of the period. Overall, product 3 prices fell by *** percent.

Brazil.--Net weighted-average quarterly U.S. f.o.b. prices and shipment quantities of the specified Brazilian ferrosilicon product 1 sold to steel producers are shown in table 22. Prices for imported Brazilian product 1 sold to steel producers fluctuated between $0.3421 and $0.4078 per pound of silicon content during 1990-91, reaching their highest point in the fourth quarter of 1990. Brazilian product 1 prices followed domestic product 1 prices very closely during 1992 and the first two quarters of 1993, reaching their lowest point in the first quarter of 1992, then increasing by *** percent during the rest of the period. Overall, prices for imported Brazilian product 1 were *** percent higher in the second quarter of 1993 than they were in the first quarter of 1990.

Egypt.--Importers did not report enough sales of Egyptian ferrosilicon to show meaningful price trends. During January 1990-June 1993, *** reported U.S. sales of imported Egyptian ferrosilicon. *** sales of imported Egyptian ferrosilicon are summarized in table 23.

Table 21
Net weighted-average U.S. f.o.b. selling prices and quantities of U.S.-produced ferrosilicon, by products, by types of customers, and by quarters, Jan. 1990-June 1993[1]

	Product 1		
	Sales to steel producers		
Period	Price	Quantity	No. of firms reporting
	Per pound contained silicon	*1,000 pounds contained silicon*	
1990:			
January-March	$0.3907	4,541	5
April-June	.3966	5,096	5
July-September	.4187	5,763	3
October-December	.4029	4,608	3
1991:			
January-March	.3715	10,158	4
April-June	.3805	5,739	4
July-September	.3830	3,324	4
October-December	.3585	4,057	4
1992:			
January-March	.3403	4,030	3
April-June	.3463	5,178	3
July-September	.3667	4,083	3
October-December	***	***	***
1993:			
January-March	***	***	***
April-June	***	***	***

Table continued. See footnote at the end of the table.

Table 21--Continued
Net weighted-average U.S. f.o.b. selling prices and quantities of U.S.-produced ferrosilicon, by products, by types of customers, and by quarters, Jan. 1990-June 1993[1]

	Product 2					
	Sales to steel producers			Sales to iron foundries		
Period	Price	Quantity	No. of firms reporting	Price	Quantity	No. of firms reporting
	Per pound contained silicon	*1,000 pounds contained silicon*		*Per pound contained silicon*	*1,000 pounds contained silicon*	
1990:						
Jan.-Mar . . .	$0.3960	20,751	6	$0.3975	6,302	4
Apr.-June . .	.4036	21,290	6	.3987	6,611	4
July-Sept . .	.4087	19,497	6	.3998	5,548	4
Oct.-Dec . . .	.4050	19,448	6	.3977	4,962	4
1991:						
Jan.-Mar . . .	.3726	18,132	5	.3935	5,251	3
Apr.-June . .	.3816	15,773	5	.3936	5,105	3
July-Sept . .	.3857	16,363	5	.3992	5,253	3
Oct.-Dec . . .	.3653	17,230	5	.3940	4,551	3
1992:						
Jan.-Mar . . .	.3429	14,410	5	.3873	8,273	4
Apr.-June . .	.3405	13,262	5	.3781	8,334	4
July-Sept . .	.3648	11,639	5	.3870	11,734	4
Oct.-Dec . . .	.3730	11,852	5	.3927	10,808	4
1993:						
Jan.-Mar . . .	.3835	11,972	5	.3883	13,033	4
Apr.-June . .	.3856	11,048	5	.3944	13,759	4

Table continued. See footnote at the end of the table.

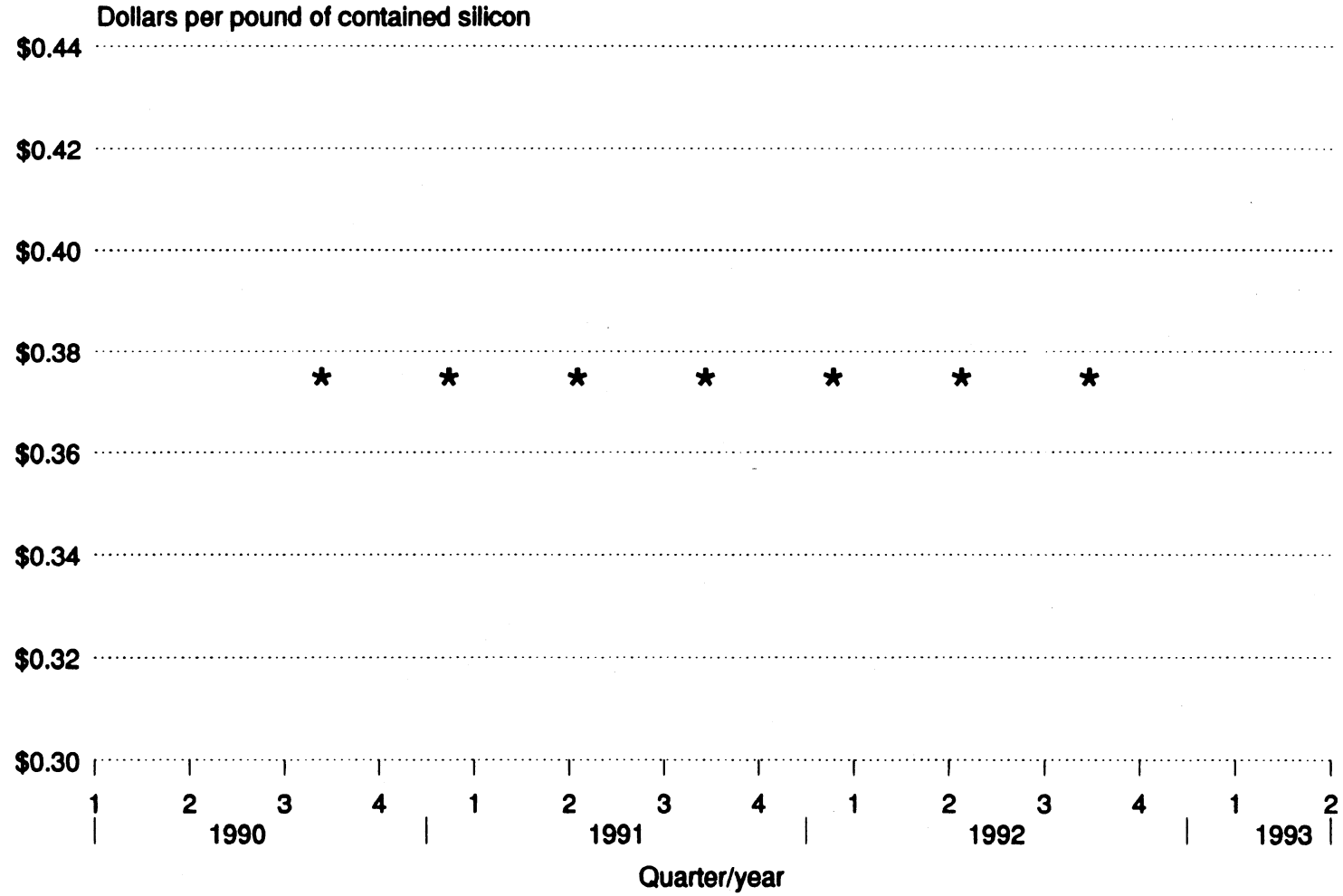
Table 21--Continued
Net weighted-average U.S. f.o.b. selling prices and quantities of U.S.-produced ferrosilicon, by products, by types of customers, and by quarters, Jan. 1990-June 1993[1]

Period	Product 3 Sales to steel producers		
	Price	Quantity	No. of firms reporting
	Per pound contained silicon	*1,000 pounds contained silicon*	
1990:			
January-March	***	***	***
April-June	***	***	***
July-September	***	***	***
October-December	***	***	***
1991:			
January-March	***	***	***
April-June	***	***	***
July-September	***	***	***
October-December	***	***	***
1992:			
January-March	***	***	***
April-June	***	***	***
July-September	***	***	***
October-December	***	***	***
1993:			
January-March	***	***	***
April-June	***	***	***

[1] The prices shown were based on total quarterly/semiannual requirement sales and are the averages of the net U.S. f.o.b. quarterly selling prices of the reporting U.S. producers weighted by each producer's quarterly sales of the specified domestic products to each type of customer shown. Quantities shown are the sum of the reporting producers' total quarterly sales volumes of the specified domestic products to each type of customer shown.

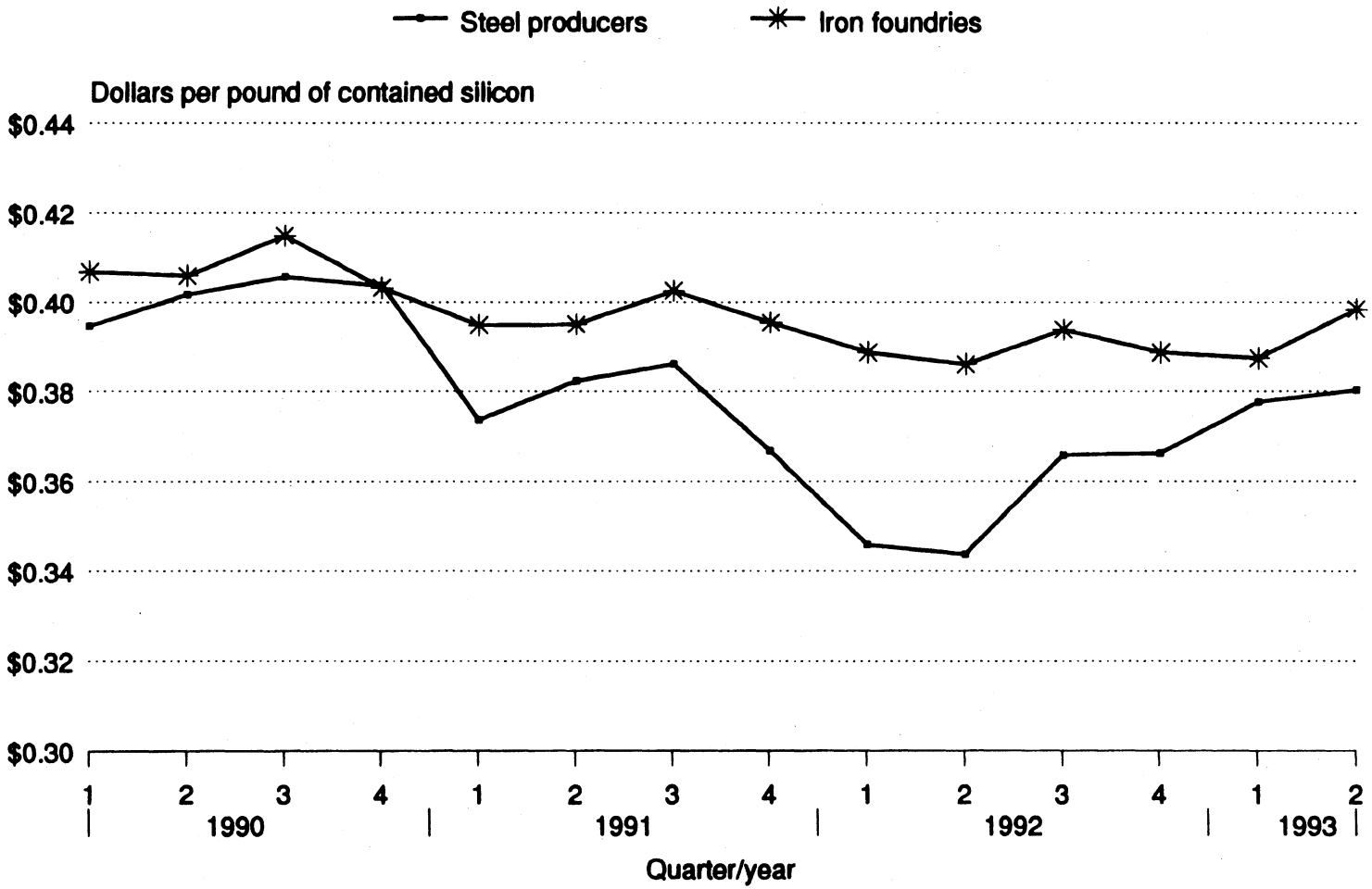
Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Figure 13
Net weighted-average f.o.b. selling prices of U.S.-produced and imported Brazilian product 1 sold to steel producers, by quarters, Jan. 1990-June 1993



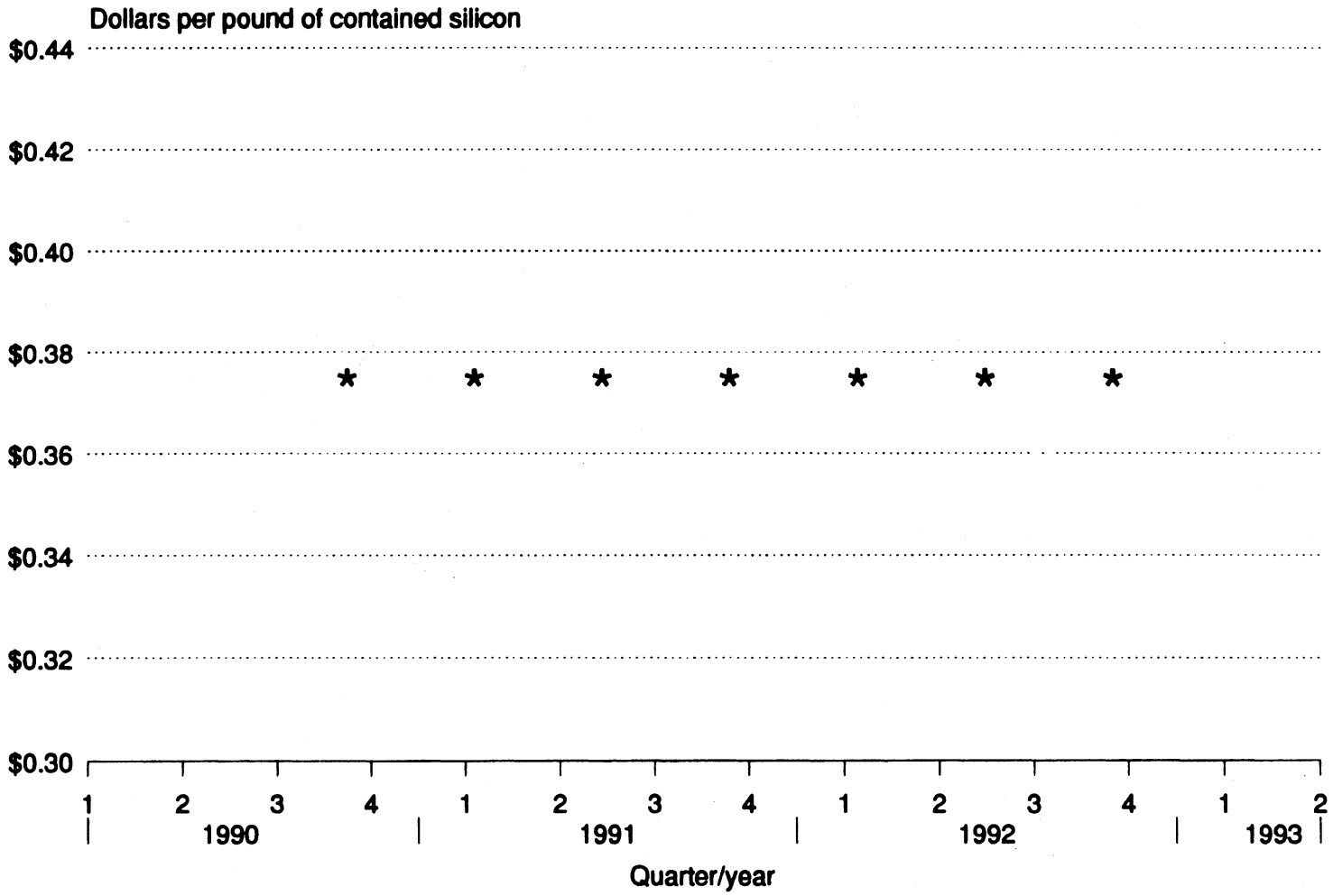
Source: Tables 21 and 22.

Figure 14
Net weighted-average f.o.b. selling prices of U.S.-produced product 2 sold to steel producers and iron foundries, by quarters, Jan. 1990-June 1993



Source: Table 21.

Figure 15
Net weighted-average f.o.b. selling prices of U.S.-produced product 3 sold to steel producers, by quarters, Jan. 1990-June 1993



Source: Table 21.

Table 22
Net weighted-average U.S. f.o.b. selling prices and quantities of ferrosilicon imported from Brazil, by products, by types of customers, and by quarters, Jan. 1990-June 1993[1]

Period	Product 1 Sales to steel producers		
	Price	Quantity	No. of firms reporting
	Per pound silicon content	*1,000 pounds silicon content*	
1990:			
January-March	***	***	***
April-June	$0.4000	3,196	3
July-September	.3721	4,640	4
October-December	***	***	***
1991:			
January-March	.3942	3,195	3
April-June	.3827	10,016	4
July-September	.3654	3,364	3
October-December	***	***	***
1992:			
January-March	.3393	11,203	4
April-June	.3438	13,230	4
July-September	.3740	15,074	5
October-December	.3702	20,303	4
1993:			
January-March	.3727	19,020	6
April-June	.3826	12,547	7

[1] The prices shown were based on total quarterly/semiannual requirement sales and are the averages of the net U.S. f.o.b. quarterly selling prices of the reporting U.S. importers weighted by each firm's quarterly sales of the specified Brazilian product to the type of customer shown above. Quantities shown are the sum of the reporting importers' total quarterly sales volumes of the specified Brazilian product to the type of customer shown above.

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

Table 23
U.S. sales quantities and prices of imported Egyptian ferrosilicon, by suppliers, by products, and by customers, Jan. 1990-Sept. 1992

* * * * * * *

Price comparisons

Nearly all of the quarterly price comparisons were between U.S.-produced and imported Brazilian ferrosilicon products; importers of the Egyptian ferrosilicon reported only a few sales of comparable products. The domestic and Brazilian price comparisons were developed from net U.S.-delivered selling prices reported in the producer and importer questionnaires. Purchasers did not provide sufficient price data to develop meaningful price comparisons.

Brazil.--Based on U.S. producer and importer questionnaire data, a total of 14 quarterly delivered price comparisons were possible between the domestic and imported Brazilian ferrosilicon for the period January 1990 through June 1993 (table 24 and figure 16). All 14 price comparisons involved product 1 sold to steel producers. Twelve of the 14 price comparisons showed that the imported Brazilian product was priced less than the domestic product, with margins of underselling averaging 5.1 percent. The two remaining price comparisons showed that prices of the imported Brazilian product were higher than prices of the domestic product, by an average of 4.3 percent.

Egypt.--Importers of Egyptian ferrosilicon reported price data for ***. ***.

Table 24
Net U.S. delivered selling prices of the U.S.-produced and imported Brazilian ferrosilicon, by products and by types of customers, and margins of under/(over) selling,[1] by quarters, Jan. 1990-June 1993[2]

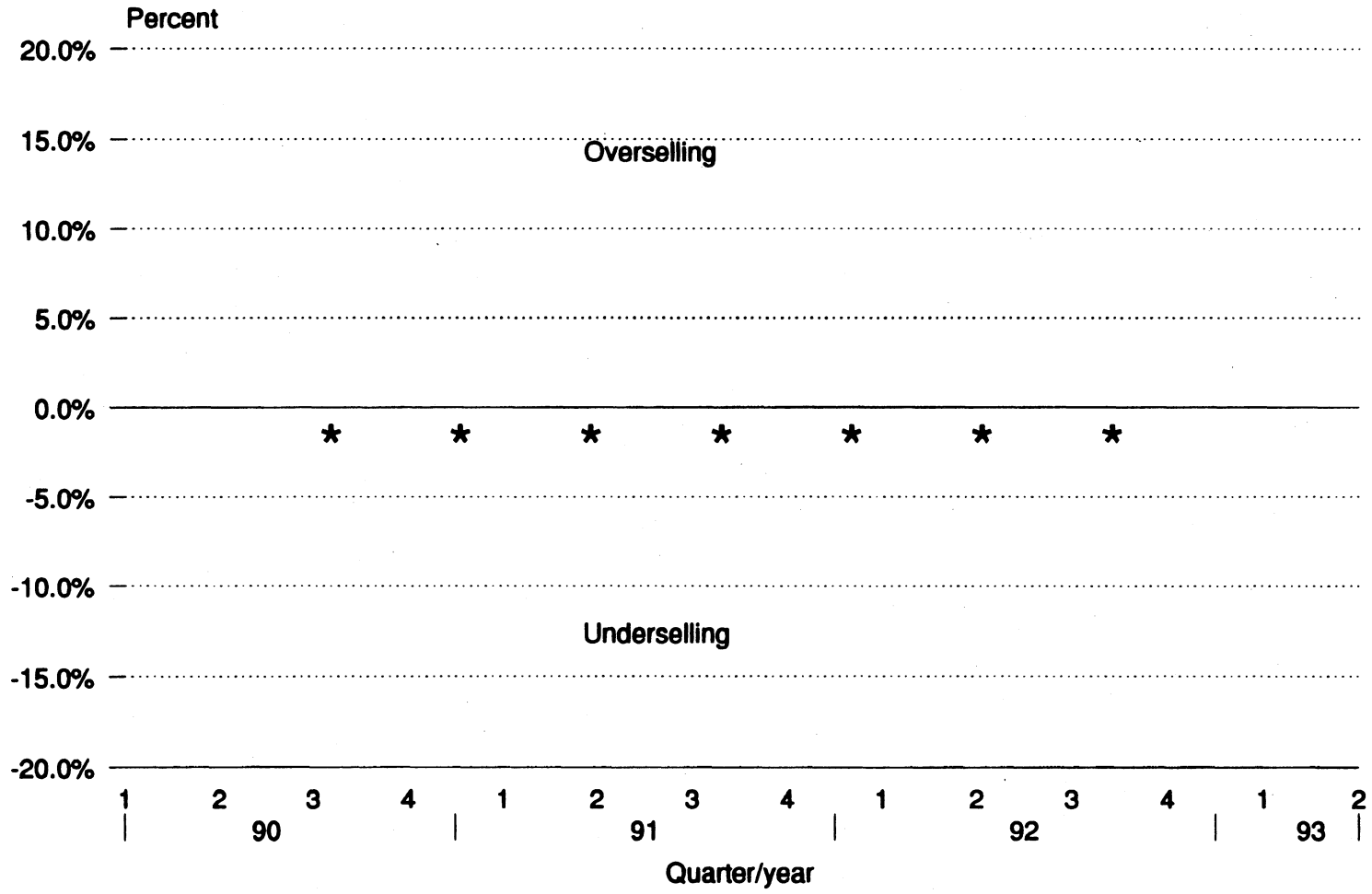
Period	Product 1 Sales to steel producers U.S. producer price	Brazilian price	Margins of under/(over) selling	Margins of under/(over) selling
	Per pound contained silicon	*Per pound contained silicon*	*Per pound contained silicon*	*Percent*
1990:				
Jan.-Mar	$0.4126	***	***	***
Apr.-June	.4182	$0.4063	$0.0119	2.8
July-Sept	.4344	.3747	.0597	13.7
Oct.-Dec	.4318	***	***	***
1991:				
Jan.-Mar	.3910	.4035	(.0125)	(3.2)
Apr.-June	.3981	.3836	.0145	3.6
July-Sept	.3944	.3748	.0195	5.0
Oct.-Dec	.3797	***	***	***
1992:				
Jan.-Mar	.3578	.3394	.0184	5.1
Apr.-June	.3680	.3538	.0142	3.9
July-Sept	.3883	.3828	.0056	1.4
Oct.-Dec	***	.3799	***	***
1993:				
Jan.-Mar	***	.3762	***	***
Apr.-June	***	.3913	***	***

[1] The percentage price differences between the U.S. and imported Brazilian ferrosilicon were calculated as differences from the U.S. producers' price. Figures in parentheses indicate that the price of the imported product was higher than the price of the domestic product during that quarter.

[2] The prices shown were based on total quarterly/semiannual requirement sales and are the averages of the domestic and imported net U.S. delivered quarterly selling prices of the reporting U.S. producers and importers weighted by each firm's quarterly sales of the specified domestic and Brazilian products to the type of customer shown above.

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

Figure 16
Margins of under/overselling, based on delivered prices of U.S.-produced and imported Brazilian product 1, by quarters, Jan. 1990-June 1993



Source: Table 24.

Exchange Rates

Quarterly foreign-exchange rate data as reported by the International Monetary Fund for Brazil and Egypt are shown in figure 17 and discussed below.

Brazil

The nominal value of the Brazilian cruzeiro depreciated by 99.1 percent against the U.S. dollar between January 1990 and March 1993, but due to inflation of 53,080 percent in Brazil during this period, the real value of the cruzeiro depreciated by 28.5 percent.

Egypt

The nominal value of the Egyptian pound depreciated by 67.1 percent against the U.S. dollar between January 1990 and March 1993, but due to inflation of 48.7 percent in Egypt during this period, the real value of the Egyptian pound fell by 52.6 percent.

Lost Sales and Lost Revenues

During these final investigations, one U.S. producer, ***, reported *** lost sales allegations involving competition from imported Brazilian ferrosilicon valued at *** and totaling *** pounds.[102] No U.S. producers reported any specific instances of lost revenues.[103] The Commission staff was able to contact four of the six purchasers cited in the lost sales allegations.

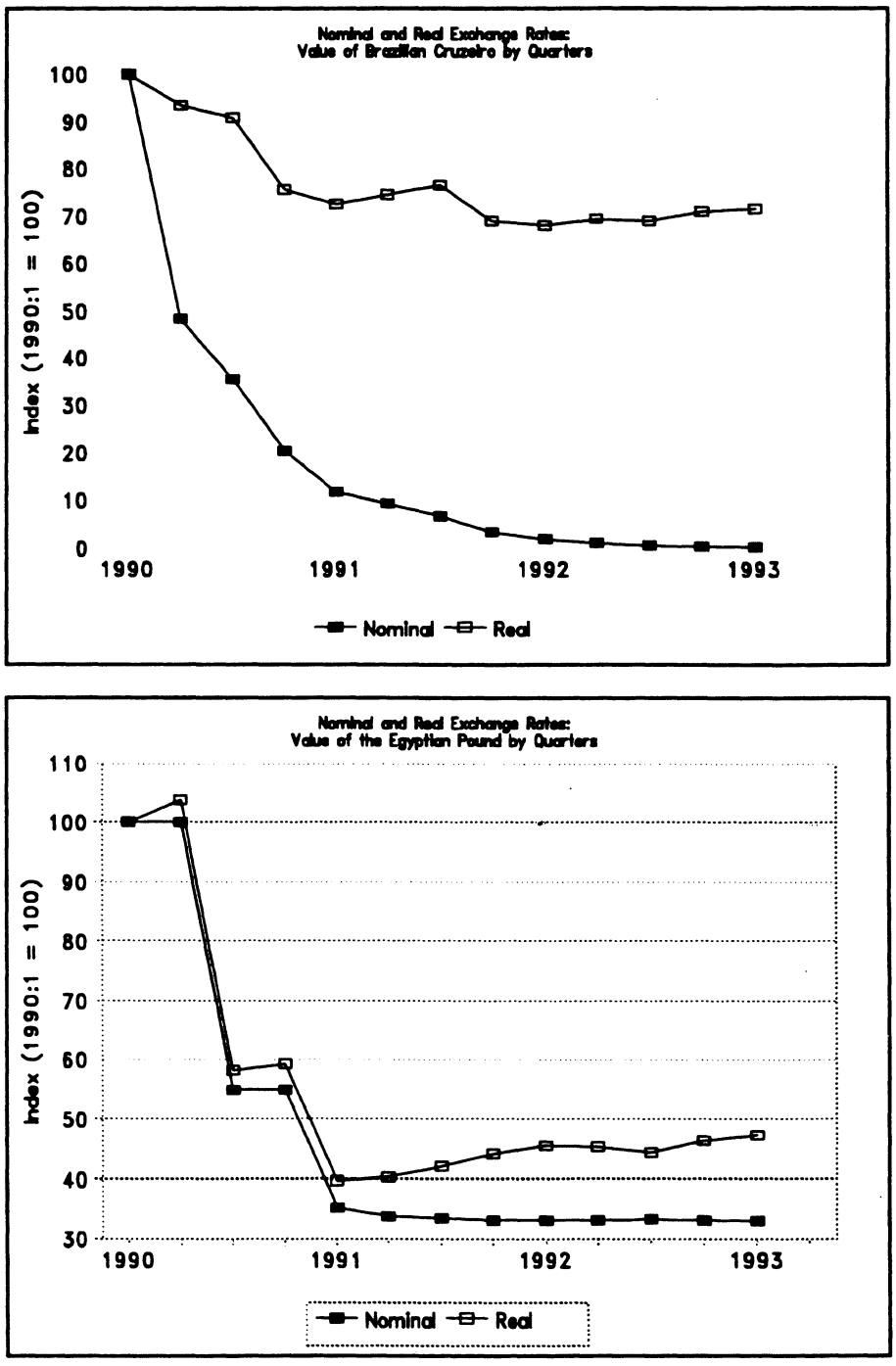
* * * * * * *[104]

[102] In this section of the report "pounds" refers to pounds of contained silicon.

[103] Four other U.S. producers of ferrosilicon, ***, indicated in their questionnaire responses that they were forced to lower their prices because of competition with lower priced subject imported products, but were unable to provide any details or country(ies) of origin. On the other hand, four U.S. producers, ***, indicated that they were not forced to lower their prices because of any low-priced ferrosilicon imported from the subject countries. No specific lost revenue allegations were received that involved ferrosilicon imported from Egypt.

[104] ***.

Figure 17
Exchange rates: Indexes of the nominal and real exchange rates between the U.S. dollar and the currencies of Brazil and Egypt, by quarters, Jan. 1990-Mar. 1993



Source: International Monetary Fund, *International Financial Statistics*, Aug. 1993.

APPENDIX A

FEDERAL REGISTER NOTICES OF THE U.S. INTERNATIONAL TRADE COMMISSION AND THE U.S. DEPARTMENT OF COMMERCE

INTERNATIONAL TRADE COMMISSION

[Investigation No. 731-TA-642 (Final)]

Ferrosilicon From Egypt; Import Investigation

AGENCY: International Trade Commission.

ACTION: Institution and scheduling of a final antidumping investigation.

SUMMARY: The Commission hereby gives notice of the institution of final antidumping investigation No. 731-TA-642 (Final) under section 735(b) of the Tariff Act of 1930 (19 U.S.C. 1673d(b)) (the Act) to determine whether an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports from Egypt of ferrosilicon, provided for in subheadings 7202.21.10, 7202.21.50, 7202.21.75, 7202.21.90, and 7202.29.00 of the Harmonized Tariff Schedule of the United States.

For further information concerning the conduct of this investigation, hearing procedures, and rules of general application, consult the Commission's Rules of Practice and Procedure, part 201, subparts A through E (19 CFR part 201), and part 207, subparts A and C (19 CFR part 207).

EFFECTIVE DATE: June 25, 1993.

FOR FURTHER INFORMATION CONTACT: Fred Fischer (202-205-3179), Office of Investigations, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436. Hearing-impaired persons can obtain information on this matter by contacting the Commission's TDD terminal on 202-205-1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202-205-2000.

SUPPLEMENTARY INFORMATION:

Background

This investigation is being instituted as a result of an affirmative preliminary determination by the Department of Commerce that imports of ferrosilicon from Egypt are being sold in the United States at less than fair value within the meaning of section 733 of the Act (19 U.S.C. 1673b). The investigation was requested in a petition filed on January 12, 1993, by AIMCOR, Pittsburgh, PA; Alabama Silicon, Inc., Bessemer, AL; American Alloys, Inc., Pittsburgh, PA; Globe Metallurgical, Inc., Cleveland OH; Silicon Metaltech, Inc., Seattle WA; Oil, Chemical & Atomic Workers Union (local 389); United Autoworkers of America Union (locals 523 and 12646); and United Steelworkers of America Union (locals 2528, 3081, and 5171).

Participation in the Investigation and Public Service List

Persons wishing to participate in the investigation as parties must file an entry of appearance with the Secretary to the Commission, as provided in section 201.11 of the Commission's rules, not later than twenty-one (21) days after publication of this notice in the **Federal Register**. The Secretary will prepare a public 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.

Limited Disclosure of Business Proprietary Information (BPI) Under an Administrative Protective Order (APO) and BPI Service List

Pursuant to section 207.7(a) of the Commission's rules, the Secretary will make BPI gathered in this final investigation available to authorized applicants under the APO issued in the investigation, provided that the application is made not later than twenty-one (21) days after the publication of this notice in the **Federal Register**. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

Staff Report

The prehearing staff report in this investigation will be placed in the nonpublic record on August 31, 1993, and a public version will be issued thereafter, pursuant to § 207.21 of the Commission's rules.

Hearing

The Commission will hold a hearing in connection with this investigation beginning at 9:30 a.m. on September 14, 1993, at the U.S. International Trade Commission Building. Requests to appear at the hearing should be filed in writing with the Secretary to the Commission on or before September 7, 1993. A nonparty who has testimony that may aid the Commission's deliberations may request permission to present a short statement at the hearing. All parties and nonparties desiring to appear at the hearing and make oral presentations should attend a prehearing conference to be held at 9:30 a.m. on September 9, 1993, at the U.S. International Trade Commission Building. Oral testimony and written materials to be submitted at the public hearing are governed by §§ 201.6(b)(2), 201.13(f), and 207.23(b) of the Commission's rules. Parties are strongly encouraged to submit as early in the investigation as possible any requests to present a portion of their hearing testimony *in camera*.

Written Submissions

Each party is encouraged to submit a prehearing brief to the Commission. Prehearing briefs must conform with the provisions of § 207.22 of the Commission's rules; the deadline for filing is September 8, 1993. Parties may also file written testimony in connection with their presentation at the hearing, as provided in § 207.23(b) of the Commission's rules, and posthearing briefs, which must conform with the provisions of § 207.24 of the Commission's rules. The deadline for filing posthearing briefs is September 22, 1993; witness testimony must be filed no later than three (3) days before the hearing. In addition, any person who has not entered an appearance as a party to the investigation may submit a written statement of information pertinent to the subject of the investigation on or before September 22, 1993. All written submissions must conform with the provisions of § 201.8 of the Commission's rules; any submissions that contain BPI must also conform with the requirements of §§ 201.6, 207.3, and 207.7 of the Commission's rules.

In accordance with §§ 201.16(c) and 207.3 of the rules, each document filed by a party to the investigation must be served on all other parties to the investigation (as identified by either the public or BPI service list), and a certificate of service must be timely filed. The Secretary will not accept a document for filing without a certificate of service.

Authority: This investigation is being conducted under authority of the Tariff Act of 1930, title VII. This notice is published pursuant to section 207.20 of the Commission's rules.

Issued: July 16, 1993.

By order of the Commission.

Donna R. Koehnke,

Secretary.

[FR Doc. 93-17506 Filed 7-22-93; 8:45 am]

BILLING CODE 7020-02-P

INTERNATIONAL TRADE COMMISSION

[Investigation No. 731-TA-641 (Final)]

Ferrosilicon From Brazil; Import Investigation

AGENCY: United States International Trade Commission.

ACTION: Institution and scheduling of a final antidumping investigation.

SUMMARY: The Commission hereby gives notice of the institution of final antidumping investigation No. 731-TA-641 (Final) under § 735(b) of the Tariff Act of 1930 (19 U.S.C. 1673d(b)) (the Act) to determine whether an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports from Brazil of ferrosilicon, provided for in subheadings 7202.21.10, 7202.21.50, 7202.21.75, 7202.21.90, and 7202.29.00 of the Harmonized Tariff Schedule of the United States.

For further information concerning the conduct of this investigation, hearing procedures, and rules of general application, consult the Commission's Rules of Practice and Procedure, part 201, subparts A through E (19 CFR part 201), and part 207, subparts A and C (19 CFR part 207).

EFFECTIVE DATE: August 12, 1993.

FOR FURTHER INFORMATION CONTACT: Fred Fischer (202-205-3179), Office of Investigations, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436. Hearing-impaired persons can obtain information on this matter by contacting the Commission's TDD terminal on 202-205-1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202-205-2000.

SUPPLEMENTARY INFORMATION:

Background

This investigation is being instituted as a result of an affirmative preliminary determination by the Department of Commerce that imports of ferrosilicon from Brazil are being sold in the United States at less than fair value within the meaning of section 733 of the Act (19

U.S.C. § 1673b). The investigation was requested in a petition filed on January 12, 1993, by AIMCOR, Pittsburgh, PA; Alabama Silicon, Inc., Bessemer, AL; American Alloys, Inc., Pittsburgh, PA; Globe Metallurgical, Inc., Cleveland OH; Silicon Metaltech, Inc., Seattle WA; Oil, Chemical & Atomic Workers Union (local 389); United Autoworkers of America Union (locals 523 and 12646); and United Steelworkers of America Union (locals 2528, 3081, and 5171).

Participation in the Investigation and Public Service List

Persons wishing to participate in the investigation as parties must file an entry of appearance with the Secretary to the Commission, as provided in section 201.11 of the Commission's rules, not later than seven (7) days after publication of this notice in the Federal Register. Section 201.11 (b) of the Commission's rules is hereby waived. The Secretary will prepare a public 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.

Limited Disclosure of Business Proprietary Information (BPI) Under an Administrative Protective Order (APO) and BPI Service List

The Secretary will make BPI gathered in this final investigation available to authorized applicants under the APO issued in the investigation, provided that the application is made not later than seven (7) days after the publication of this notice in the Federal Register. Section 207.7 (a)(2) of the Commission's rules is hereby waived. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

Staff Report

The prehearing staff report in this investigation will be placed in the nonpublic record on August 31, 1993, and a public version will be issued thereafter, pursuant to § 207.21 of the Commission's rules.

Hearing

The Commission will hold a hearing in connection with this investigation beginning at 9:30 a.m. on September 14, 1993, at the U.S. International Trade Commission Building. Requests to appear at the hearing should be filed in writing with the Secretary to the Commission on or before September 7, 1993. A nonparty who has testimony that may aid the Commission's deliberations may request permission to present a short statement at the hearing. All parties and nonparties desiring to appear at the hearing and make oral presentations should attend a prehearing conference to be held at 9:30 a.m. on September 9, 1993, at the U.S. International Trade Commission Building. Oral testimony and written materials to be submitted at the public hearing are governed by §§ 201.6(b)(2), 201.13(f), and 207.23(b) of the Commission's rules. Parties are strongly encouraged to submit as early in the investigation as possible any requests to present a portion of their hearing testimony *in camera*.

Written Submissions

Each party is encouraged to submit a prehearing brief to the Commission. Prehearing briefs must conform with the provisions of § 207.22 of the Commission's rules; the deadline for filing is September 8, 1993. Parties may also file written testimony in connection with their presentation at the hearing, as provided in § 207.23(b) of the Commission's rules, and posthearing briefs, which must conform with the provisions of § 207.24 of the Commission's rules. The deadline for filing posthearing briefs is September 22, 1993; witness testimony must be filed no later than three (3) days before the hearing. In addition, any person who has not entered an appearance as a party to the investigation may submit a written statement of information pertinent to the subject of the investigation on or before September 22, 1993. A supplemental brief addressing only the final antidumping determination of the Department of Commerce is due on January 3, 1993. The brief may not exceed five (5) pages in length. All written submissions must conform with the provisions of section 201.8 of the Commission's rules; any submissions that contain BPI must also conform with the requirements of §§ 201.6, 207.3, and 207.7 of the Commission's rules.

In accordance with §§ 201.16(c) and 207.3 of the rules, each document filed by a party to the investigation must be served on all other parties to the investigation (as identified by either the public or BPI service list), and a certificate of service must be timely filed. The Secretary will not accept a document for filing without a certificate of service.

Authority: This investigation is being conducted under authority of the Tariff Act of 1930, title VII. This notice is published pursuant to § 207.20 of the Commission's rules.

By order of the Commission.

Issued: August 23, 1993.

Donna R. Koehnke,

Secretary.

[FR Doc. 93-20827 Filed 8-25-93; 8:45 am]

BILLING CODE 7020-02-P

[A-729-801]

Final Determination of Sales at Less Than Fair Value; Ferrosilicon From Egypt

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

EFFECTIVE DATE: September 14, 1993.

FOR FURTHER INFORMATION CONTACT: Mary Jenkins or Brian Smith, Office of Antidumping Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC, 20230, at (202) 482-1756 and (202) 482-1766, respectively.

FINAL DETERMINATION: The Department of Commerce (the Department) determines that ferrosilicon from Egypt is being, or is likely to be, sold in the United States at less than fair value, as provided in section 735 of the Tariff Act of 1930, as amended (the Act) (19 U.S.C. 1673d). The estimated margins are shown in the "Continuation of Suspension of Liquidation" section of this notice.

Case History

Since the publication of our affirmative preliminary determination on June 28, 1993 (58 FR 34564), the only event which has occurred is that petitioners submitted a case brief on August 10, 1993.

Scope of Investigation

The product covered by this investigation is ferrosilicon, a ferroalloy generally containing, by weight, not less than four percent iron, more than eight percent but not more than 96 percent silicon, not more than 10 percent chromium, not more than 30 percent manganese, not more than three percent phosphorous, less than 2.75 percent magnesium, and not more than 10 percent calcium or any other element.

Ferrosilicon is a ferroalloy produced by combining silicon and iron through smelting in a submerged-arc furnace. Ferrosilicon is used primarily as an alloying agent in the production of steel and cast iron. It is also used in the steel industry as a deoxidizer and a reducing agent, and by cast iron producers as an inoculant.

Ferrosilicon is differentiated by size and by grade. The sizes express the maximum and minimum dimensions of the lumps of ferrosilicon found in a given shipment. Ferrosilicon grades are defined by the percentages by weight of contained silicon and other minor elements. Ferrosilicon is most commonly sold to the iron and steel industries in standard grades of 75 percent and 50 percent ferrosilicon.

Calcium silicon, ferrocalcium silicon, and magnesium ferrosilicon are specifically excluded from the scope of this investigation. Calcium silicon is an alloy containing, by weight, not more than five percent iron, 60 to 65 percent silicon and 28 to 32 percent calcium. Ferrocalcium silicon is a ferroalloy containing by weight, not less than four percent iron, 60 to 65 percent silicon, and more than 10 percent calcium. Magnesium ferrosilicon is a ferroalloy

containing, by weight, not less than four percent iron, not more than 55 percent silicon, and not less than 2.75 percent magnesium.

Ferrosilicon is classifiable under the following subheadings of the Harmonized Tariff Schedule of the United States (HTSUS): 7202.21.1000, 7202.21.5000, 7202.21.7500, 7202.21.9000, 7202.29.0010, and 7202.29.0050. The HTSUS subheadings are provided for convenience and customs purposes. Our written description of the scope of this investigation is dispositive.

Period of Investigation

The period of investigation (POI) is July 1, 1992, through December 31, 1992.

Best Information Available (BIA)

We have determined, in accordance with section 776(c) of the Act, that the use of BIA is appropriate for sales of the subject merchandise in this investigation. In deciding to use BIA, section 776(c) provides that the Department may take into account whether the respondent was able to produce information requested in a timely manner and in the form required. In this case, the exporter of ferrosilicon from Egypt, the Egyptian Ferroalloy Company (EFACO), did not respond to any request for information.

As BIA, we are assigning the highest margin among the margins in the petition, in accordance with the two-tiered BIA methodology under which the Department imposes the most adverse rate upon those respondents who refuse to cooperate or otherwise significantly impede the proceeding, and as outlined in the Final Determinations of Sales at Less than Fair Value: Antifriction Bearings (Other Than Tapered Roller Bearings and Parts Thereof from the Federal Republic of Germany, Italy, Japan, Romania, Sweden, Thailand, and the United Kingdom (54 FR 18992, 19033, May 3, 1989); and as upheld in Krupp Stahl AG. et al v. U.S., Slip Op. 93-84 (CIT May 24, 1993).

Continuation of Suspension of Liquidation

In accordance with section 733(d)(1) (19 U.S.C. 1673b(d)(1)) of the Act, we are directing the U.S. Customs Service to continue to suspend liquidation of all entries of ferrosilicon from Egypt, as defined in the "Scope of Investigation" section of this notice, that are entered, or withdrawn from warehouse, for consumption on or after the date of publication of this notice in the Federal Register.

The Customs Service shall require a cash deposit or posting of a bond equal to the estimated margin amount by which the foreign market value of the subject merchandise exceeds the United States price as shown below. The suspension of liquidation will remain in effect until further notice.

Manufacturer/producer/exporter	Weighted average margin percent
The Egyptian Ferroalloy Company	90.50
All Others	90.50

International Trade Commission (ITC) Notification

In accordance with section 735(d) of the Act, we have notified the ITC of our determination.

Notification to Interested Parties

This notice also serves as the only reminder to parties subject to administrative protective order (APO) of their responsibility covering the return or destruction of proprietary information disclosed under APO in accordance with 19 CFR 353.35(d). Failure to comply is a violation of the APO. See 19 CFR 353.35(e).

This notice is published pursuant to section 735(d) of the Act and (19 U.S.C. 1673d(d)) and 19 CFR 353.20(a).

Dated: September 7, 1993.

Joseph A. Spetrini,

Acting Assistant Secretary for Import Administration.

[FR Doc. 93-22462 Filed 9-13-93; 8:45 am]

BILLING CODE 3510-DS-P

International Trade Administration

[A-351-820]

Preliminary Determination of Sales at Less Than Fair Value: Ferrosilicon From Brazil

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

EFFECTIVE DATE: August 16, 1993.

FOR FURTHER INFORMATION CONTACT: Kimberly Hardin, Office of Antidumping Investigations, Import Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230; telephone (202) 482-0371.

PRELIMINARY DETERMINATION: We preliminarily determine that ferrosilicon from Brazil is being, or is likely to be, sold in the United States at less than fair value, as provided in section 733 of the Tariff Act of 1930 (the Act), as amended. The estimated margins are shown in the "Suspension of Liquidation" section of this notice.

Scope of Investigation

The product covered by this investigation is ferrosilicon, a ferroalloy generally containing, by weight, not less than four percent iron, more than eight percent but not more than 96 percent silicon, not more than 10 percent chromium, not more than 30 percent manganese, not more than three percent phosphorous, less than 2.75 percent magnesium, and not more than 10 percent calcium or any other element.

Ferrosilicon is a ferroalloy produced by combining silicon and iron through smelting in a submerged-arc furnace.

Ferrosilicon is used primarily as an alloying agent in the production of steel and cast iron. It is also used in the steel industry as a deoxidizer and a reducing agent, and by cast iron producers as an inoculant.

Ferrosilicon is differentiated by size and by grade. The sizes express the maximum and minimum dimensions of the lumps of ferrosilicon found in a given shipment. Ferrosilicon grades are defined by the percentages by weight of contained silicon and other minor elements. Ferrosilicon is most commonly sold to the iron and steel industries in standard grades of 75 percent and 50 percent ferrosilicon.

Calcium silicon, ferrocalcium silicon, and magnesium ferrosilicon are specifically excluded from the scope of these investigations. Calcium silicon is an alloy containing, by weight, not more than five percent iron, 60 to 65 percent silicon and 28 to 32 percent calcium. Ferrocalcium silicon is a ferroalloy containing, by weight, not less than four percent iron, 60 to 65 percent silicon, and more than 10 percent calcium. Magnesium ferrosilicon is a ferroalloy containing, by weight, not less than four percent iron, not more than 55 percent silicon, and not less than 2.75 percent magnesium.

We are investigating whether sales of slag should be excluded from our fair value comparisons. Slag is a by-product of ferrosilicon production and contains impurities which preclude it from being sold as ferrosilicon. We will examine this issue further at verification and will make a determination with regard to slag in the final determination.

Ferrosilicon is currently classifiable under the following subheadings of the Harmonized Tariff Schedule of the United States (HTSUS): 7202.21.1000, 7202.21.5000, 7202.21.7500, 7202.21.9000, 7202.29.0010, and 7202.29.0050. The HTSUS subheadings are provided for convenience and customs purposes. Our written description of the scope of this investigation is dispositive.

Period of Investigation

The period of investigation is July 1, 1992, through December 31, 1992.

Case History

Since the notice of initiation on February 1, 1993 (58 FR 7529, February 8, 1993), the following events have occurred.

On February 3, 1993, we sent a cable to the U.S. consulates in Rio de Janeiro and Sao Paulo requesting a list of all known producers and exporters of the subject merchandise and information about the parties named. On February 12, 1993, the U.S. consulate in Rio de Janeiro provided us with the information requested.

On February 26, 1993, the International Trade Commission (ITC) issued an affirmative preliminary determination (USITC Publication 2605, February, 1993).

On March 8, 1993, we presented an Antidumping Survey to Cia De Ferro Ligas Da Bahia (Ferbasa), Libra Lingas Do Brazil (Libra), Cia Brasileira Carbureto de Calcio (CBCC) and Rima Electrometalurgia S.A. (Rima), in order to identify the Brazilian exporters of ferrosilicon which should receive antidumping questionnaires. On March 10, 1993, we issued antidumping questionnaires to Minas Gerais Minasligas (Minasligas) and Italmagnesio S.A. Industria e Comercio (Italmagnesio). We also issued a cost of production (COP) questionnaire to Minasligas.

On March 19, 1993, Italmagnesio requested a one week extension of time in which to respond to section A, the general information section, of the Department's antidumping questionnaire. On March 22, 1993, we granted the extension. On March 31, 1993, we received Italmagnesio's Section A questionnaire response.

On March 22, 1993, we received responses to the Antidumping Survey from CBCC, Ferbasa and Rima. Also, on March 22, 1993, we received a letter from Libra requesting an eight day extension of time in which to respond to the Antidumping Survey. Although we were unable to grant the request as the letter was not officially filed, we provided filing instructions and allowed five days for the request to be officially filed. On March 26, 1993, we received an officially filed extension request from Libra. On March 26, 1993, we granted Libra the extension for filing its Antidumping Survey response and received a timely response.

On March 24, 1993, Minasligas submitted its response to section A of the questionnaire.

On April 6, 1993, we presented sections A, B (sales in the home market or to third countries), C (sales to the United States), and D (cost of production/constructed value), of the antidumping questionnaire to CBCC.

On April 6, 1993, we received requests from Italmagnesio and Minasligas for an extension of time in which to respond to sections B and C, and sections B, C and D, respectively, of the questionnaire. On April 8, 1993, we granted extensions to Minasligas and Italmagnesio.

On April 8, 1993, we presented supplemental questionnaire instructions to CBCC, Italmagnesio, and Minasligas regarding special reporting requirements applicable to hyperinflationary economies.

On April 8, 1993, Italmagnesio submitted revised quantity and value information.

On April 13, 1993, CBCC requested an extension of time to respond to sections B and C of the questionnaire. On April 19, 1993, we received a request from CBCC for an extension of time in which to respond to section D of the questionnaire. On April 19, 1993, we granted CBCC extensions for responding to sections B, C, and D of the questionnaire.

On April 16, 1993, we issued deficiency letters to Italmagnesio and Minasligas regarding their respective responses to section A of the questionnaire.

On April 20, 1993, petitioners submitted corrections to alleged computational errors in the less than fair value (LTFV) margins that were published in the notice of initiation, amended their sales below the COP allegation, and submitted an allegation of sales below the COP using company-specific data previously reported by Italmagnesio. On April 27, 1993, petitioners provided further detail concerning the computations contained in their April 20, 1993, COP submission On May 10, 1993, we initiated a COP investigation for Italmagnesio and, on May 11, 1993, we issued a COP questionnaire to Italmagnesio.

On April 21, 1993, CBCC submitted its response to section A of the questionnaire. On April 29, 1993, we issued a deficiency letter to CBCC for its section A questionnaire response. On April 30, 1993, Italmagnesio and Minasligas submitted responses to the Department's respective section A deficiency letters.

On May 3, 1993, Minasligas submitted its response to section D of the Department's questionnaire.

On May 6, 1993, CBCC requested a one week extension to respond to sections B and C of the Department's questionnaire.

On May 11, 1993, we denied CBCC's extension request as an extension had previously been granted for this response and because of time constraints in the investigation. On May 13, 1993, we received CBCC's section A deficiency response.

On May 14, 1993, we issued a deficiency letter to Italmagnesio for its section B and C questionnaire response.

On May 14, we received Italmagnesio's section A deficiency response.

On May 18, 1993, we received CBCC's response to sections B and C of the Department's questionnaire.

On May 18, 1993, we issued a deficiency letter to Minasligas for its section B and C questionnaire response.

On May 20, 1993, we issued deficiency letters to Minasligas and Italmagnesio for their respective responses to the Department's section A deficiency letters.

On May 24, 1993, at the request of petitioners, we postponed the preliminary determination until not later than August 10, 1993.

On May 25, 1993, Italmagnesio requested an extension of time in which to respond to the Department's section B and C deficiency letter. On May 25, 1993, we granted this extension.

On May 26, 1993, we received CBCC's section D questionnaire response.

On May 27, 1993, Minasligas submitted a revised exhibit to its section D response.

On May 27, 1993, we issued CBCC a second deficiency letter.

On June 1, 1993, we received Minasligas' section B and C deficiency response.

On June 3, 1993, we received Italmagnesio's response to our second section A deficiency letter.

On June 4, 1993, we issued a deficiency letter to CBCC for its response to sections B and C of the questionnaire.

On June 7, 1993, Italmagnesio submitted clearer copies of exhibits that had previously been submitted on June 4, 1993.

On June 7, 1993, we received an extension request from Italmagnesio to respond to section D of the Department's questionnaire. On June 7, 1993, we granted the extension.

On June 9, 1993, we issued deficiency letters to CBCC and Minasligas based upon their respective section D questionnaire responses.

On June 10, 1993, CBCC submitted its response to the Department's second section A deficiency letter.

On June 14, 1993, Minasligas requested an extension of time in which to respond to the Department's section D deficiency letter. On June 16, 1993, we granted the extension.

On June 15, 1993, Italmagnesio submitted its response to section D of the questionnaire.

On June 21, 1993, CBCC submitted its response to the Department's section B and C deficiency letter.

On June 23, 1993, we issued a deficiency letter to Minasligas based upon its responses to the sections A, B and C deficiency letters.

On June 24, 1993, we issued a deficiency letter to Italmagnesio based upon its response to section D of the questionnaire. On June 28, 1993, we issued a deficiency letter to Italmagnesio based upon its section B and C deficiency response.

On June 29, 1993, CBCC requested an extension of time in which to respond to the Department's section D deficiency letter. On June 30, 1993, we denied CBCC the extension as CBCC had already received an extension of time for this response and because of the time constraints in the investigation. On June 30, 1993, CBCC submitted the majority of its response to the section D deficiency letter. On July 9, 1993, CBCC submitted the balance of its section D deficiency letter. On June 30, 1993, we issued a deficiency letter to CBCC based upon its response to the Department's section B and C deficiency letter.

On June 30, 1993, we received Minasligas' section D deficiency response.

On July 7, 1993, Italmagnesio requested an extension of time in which to respond to the Department's section B, C and D deficiency letters. On July 8, 1993, we granted the extensions.

On July 7, 1993, we received Minasligas' response to the Department's section D deficiency response. On July 7, 1993, we also received Minasligas' response to our deficiency letter based on its responses to our sections A, B and C deficiency letters.

On July 15, 1993, we received a response to the Department's deficiency letter covering CBCC's section A, B and C deficiency responses.

On July 19, 1993, Minasligas submitted its response to the Department's deficiency letter covering Minasligas' section B and C deficiency response.

On July 20, 1993, we received a request from CBCC to extend the final determination in the event of an affirmative preliminary determination. On July 23, 1993, we received a similar request on behalf of Italmagnesio and Minasligas.

On July 20, 1993, petitioners alleged that critical circumstances exist with respect to imports of ferrosilicon from Brazil. See "Critical Circumstances" section of this notice. On July 23, 1993, we solicited export data from CBCC, Italmagnesio, and Minasligas.

On July 22, 1993, Minasligas submitted a revised U.S. sales listing because it discovered a previously unreported sale. The revised sales listing also updated inventory carrying costs that had been corrected in the text of the July 19, 1993, submission but had not been corrected on the diskette containing the sales listing.

On July 23, 1993, Minasligas responded to petitioners' comments on section D of the Department's questionnaire.

On July 23, 1993, we provided Italmagnesio and Minasligas with the Department's proposed methodology for reporting inventory holding gains and losses. We also requested that Italmagnesio and Minasligas submit additional information relating to the inventory holding gains and losses.

On July 26, 1993, Minasligas resubmitted exhibits for its July 19, 1993 submission. On July 26, 1993, Italmagnesio resubmitted copies of exhibits due to poor quality transmission.

On July 28, 1993, Italmagnesio provided inventory gain/loss data. On July 30, 1993, Italmagnesio provided support for the inventory gain/loss data submitted on July 28, 1993. On July 28, Minasligas provided inventory gain/loss data.

On August 2, 1993, petitioners submitted comments on deficiencies in respondent's questionnaire responses and how the Department should treat the deficiencies in the preliminary determination.

On August 6, 1993, Italmagnesio and Minasligas submitted company-specific export data.

On August 6, 1993, we requested all respondents to resubmit their sales listings and product concordances on the basis of the instructions contained in appendix V, the section covering product scope and description criteria, of the questionnaire.

Best Information Available

Because all respondents failed to respond adequately to our questionnaire, we must base our determination on the "best information available" (BIA), pursuant to section 776(c) of the Act. Specifically, all three respondents failed to prepare their model match concordance according to the instructions set forth in appendix V to the Department's antidumping questionnaire and failed to identify unique product characteristics as required by appendix V. Furthermore, respondents failed to supply this information despite the fact that they were specifically requested to do so on three separate occasions including the original questionnaire, the section B and C deficiency letters, and the deficiency letters covering the section B and C deficiency responses. If respondents provide the information as requested within the deadlines set forth in our letter of August 6, 1993, we will conduct verification and consider such

information for purposes of the final determination.

In determining what to use as BIA, the Department follows a two-tiered methodology, whereby the Department normally assigns lower margins to those respondents who substantially cooperated in an investigation and margins based on more adverse assumptions for those respondents who did not cooperate in an investigation. Because CBCC, Italmagnesio, and Minasligas have all responded to our requests for information, we determined them to be substantially cooperative for purposes of this preliminary determination.

On January, 26, 1993, February 1, 1993, and April 20, 1993, petitioners amended the petition. The April 20, 1993, amendment alleged that the Department had made computational errors in the LTFV margins published in the notice of initiation; it also amended petitioners' allegation of sales below COP by using Brazilian company-specific data. The Department has reviewed the margins contained in its notice of initiation, and has corrected those computational errors which were made. The computational errors include failure to recalculate any figures which were a percentage of the revised cost of manufacturing. The cost of manufacturing was revised based upon conversion errors made by petitioners with respect to two material inputs as detailed in the notice of initiation.

We have, however, determined not to rely on petitioners' April 20, 1993, amendment for purposes of calculating a margin based on BIA in this preliminary determination. Since the purpose of a response is to provide data to the Department so that it can conduct an analysis within the bounds of the statute, it is inappropriate for petitioners to extract information from a response to amend its petition, after initiation, effectively for purposes of proposing a BIA rate. The purpose of the BIA provision, in turn, is to encourage respondents to submit full and accurate responses to the Department's questionnaire. Allowing petitioners to use data contained in responses in a piece-meal manner in order to increase the margins alleged in the petition would serve as a disincentive to respondents to provide full and accurate responses. Therefore, we have rejected petitioners' recommendation that the estimated petition margins should be based on amendments filed following the initiation of the investigation. Accordingly, as BIA, we used the simple average of the LTFV margins as contained in the petition, as amended, as of the date of initiation, corrected as noted above.

Postponement of Final Determination

As noted in the "Case History" section of this notice, we received requests from all respondents to postpone the final determination in the event of an affirmative preliminary determination. We find no compelling reasons to deny these requests. Therefore, in accordance with §353.20(b)(1) of the Department's regulations, we are postponing the final determination until not later than 135 days from the date of publication of this notice in the **Federal Register**.

Critical Circumstances

On July 20, 1993, petitioners alleged that "critical circumstances" exist with respect to imports of ferrosilicon from Brazil. Section 733(e)(1) of the Act provides that the Department will determine whether there is a reasonable basis to believe or suspect that:

(A)(i) There is a history of dumping in the United States or elsewhere of the class or kind of merchandise which is the subject of the investigation, or

(ii) The person by whom, or for whose account, the merchandise was imported knew or should have known that the exporter was selling the merchandise which is the subject of the investigation at less than its fair value, and,

(B) There have been massive imports of the class or kind of merchandise which is the subject of the investigation over a relatively short period.

Regarding (A)(i) above, we normally consider whether there has been an antidumping order in the United States or elsewhere on the subject merchandise in determining whether there is a history of dumping. Regarding (A)(ii) above, we normally consider margins of 25 percent or more for purchase price comparisons and 15 percent or more for exporter's sales price comparisons as sufficient to impute knowledge of dumping. Since the preliminary estimated dumping margin for all exporters of ferrosilicon from Brazil is in excess of 25 percent, we can impute knowledge of dumping under section 733(e)(1)(A)(ii) of the Act.

Pursuant to section 733(e)(1)(B), we generally consider the following factors in determining whether imports have been massive over a short period of time: (1) The volume and value of the imports; (2) seasonal trends (if applicable); and (3) the share of domestic consumption accounted for by imports. If imports during the period immediately following the filing of a petition increase by at least 15 percent over imports during a comparable period immediately preceding the filing of a petition, we normally consider them massive.

For purposes of determining whether there have been massive imports over a relatively short period of time, the Department relied on official U.S. statistics. We were unable to consider the company-specific information submitted by respondents on August 6, 1993, and August 9, 1993, as there was not sufficient time to analyze it prior to the preliminary determination. Pursuant to 19 CFR 353.16(g), we compared the import volumes for August 1992 through December 1992 as the base period, and January 1993 through May 1993 as the comparison period. This was the most current period prior to the preliminary determination for which import statistics were available.

Based on our analysis of imports of merchandise under the relevant HTS categories, we find that imports of ferrosilicon from the base period to the comparison period have increased by more than 15 percent. We also examined the import data to ensure that the increase in imports did not simply reflect seasonal trends. The data does not indicate that seasonal trends were responsible for the increases in shipments during the comparison period. With respect to share of domestic consumption, the information available to us at this time does not allow us to evaluate whether the increase in absolute volume of shipments of ferrosilicon can be accounted for by a change in domestic consumption. Therefore, in accordance with 19 CFR 353.16(a)(2), we find that imports of the subject merchandise have been massive over a relatively short period of time.

Because the dumping margins are sufficient to impute knowledge of dumping, and because imports have been massive, in accordance with section 733(e) of the Act, we find that critical circumstances exist with respect to imports of the subject merchandise. With respect to the firms covered by the "All Others" rate, because the dumping margins are sufficient to impute knowledge of dumping, and because we have determined that imports of ferrosilicon have been massive over a relatively short time, we determine that critical circumstances also exist for "all other" firms.

We will examine the company-specific export data provided by respondents at verification and will consider the data and any comments for purposes of the final determination.

Verification

As provided in section 776(b) of the Act, we will verify the information used in making our final determination.

Suspension of Liquidation

In accordance with section 733(d)(1) of the Act, we are directing the Customs Service to suspend liquidation of all entries of ferrosilicon from Brazil, as defined in the "Scope of Investigation" section of this notice, that are entered, or withdrawn from warehouse, for consumption on or after a date which is 90 days prior to the date of publication of this notice in the Federal Register. The Customs Service shall require a cash deposit or positing of a bond equal to the estimated margin amount by which the foreign market value of the subject merchandise exceeds the United States price as shown below. The suspension of liquidation will remain in effect until further notice.

Manufacturer/producer/exporter	Margin percent	Critical circumstances
Italmagnesio S.A. Industria e Comercio.	28.22	Yes.
Companhia Ferroligas Minas Gerais.	28.22	Yes.
Companhia Brasileira Carbureto de Calcio.	28.22	Yes.
All Others	28.22	Yes.

ITC Notification

In accordance with section 733(f) of the Act, we have notified the ITC of our determination. If our final determination is affirmative, the ITC will determine whether imports of the subject merchandise are materially injuring, or threaten material injury to, the U.S. industry, before the later of 120 days after the date of the preliminary determination or 45 days after our final determination.

Public Comment

In accordance with 19 CFR 353.38, case briefs or other written comments in at least ten copies must be submitted to the Assistant Secretary for Import Administration no later than October 27, 1993, and rebuttal briefs no later than November 1, 1993. In accordance with 19 CFR 353.38(b), we will hold a public hearing, if requested, to give interested parties an opportunity to comment on arguments raised in case or rebuttal briefs. Tentatively, the hearing will be held on November 3, 1993, at 1:30 p.m. at the U.S. Department of Commerce, room 3708, 14th Street and Constitution Avenue, NW., Washington, DC 20230. Parties should confirm by telephone the time, date, and place of the hearing 48 hours before the scheduled time.

Interested parties who wish to request a hearing must submit a written request to the Assistant Secretary for Import Administration, U.S. Department of Commerce, Room B-099, within ten days of the publication of this notice in the Federal Register. Request should contain: (1) The party's name, address, and telephone number; (2) the number of participants; and (3) a list of the issues to be discussed. In accordance with 19 CFR 353.38(b), oral presentation will be limited to issues raised in the briefs.

This determination is published pursuant to section 733(f) of the Act (19 U.S.C. 1673b(f)) and 19 CFR 353.15(a)(4).

Dated: August 10, 1993.

Joseph A. Spetrini,

Acting Assistant Secretary for Import Administration.

[FR Doc. 93-19725 Filed 8-13-93; 8:45 am]

BILLING CODE 3510-DS-P

APPENDIX B

WITNESS LIST OF THOSE APPEARING AT THE HEARING

CALENDAR OF PUBLIC HEARING

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

Subject	:	FERROSILICON FROM BRAZIL and FERROSILICON FROM EGYPT
Inv. Nos.	:	731-TA-641 (Final) and 731-TA-642 (Final)
Date and Time	:	September 14, 1993 - 9:30 a.m.

Sessions were held in connection with the investigation in the Main Hearing Room 101 of the United States International Trade Commission, 500 E St., S.W., Washington, D.C.

Opening Remarks

Petitioner

Respondents

In support of Imposition of Antidumping Duties

Baker & Botts
Washington, D.C.
On behalf of

AIMCOR
Alabama Silicon, Inc.
American Alloys, Inc.
Globe Metallurgical, Inc.
Silicon Metaltech Inc.,
Oil, Chemical and Atomic Workers, Local 389
United Autoworkers of America, Local 523
United Steelworkers of America, Locals 2528, 3081, 5171, and 12646

In support of Imposition of Antidumping Duties--Continued

William D. Beard, President, American Alloys, Inc.

Kenneth R. Button, Vice President, Economic Consulting Services, Incorporated

John Derrick, Research Assistant, Economic Consulting Services, Incorporated

William D. Kramer)
John B. Veach III)--OF COUNSEL
Michael X. Marinelli)

In Opposition to the Imposition of Antidumping Duties

Dorsey & Whitney
Washington, D.C.
On behalf of

Brazilian Ferroalloy Producers Association
Adelmo Melgaco, Executive Director

Companhia Ferroligas Minas Gerais-Minasligas (Minasligas)

Italmagnesio S.A Industria E Comericio (Italmagnesio)

Philippe M. Bruno)
Munford Page Hall,II)--OF COUNSEL
L. Daniel Mullaney)
Monica Vallada)

In Opposition to the Imposition of Antidumping Duties--Continued

Rogers and Wells
Washington, D.C.
On behalf of

MG Ores and Alloys ("MG")
Ulrich Krauskopf, Vice President,

ACI Chemical Company
David Johnson, Trader, ACI Chemical Company, Great Neck, NY

William Silverman)--OF COUNSEL
Carrie A. Simon)

APPENDIX C

SUMMARY DATA

Table C-1
Ferrosilicon: Summary data concerning the U.S. market, 1990-92, Jan.-June 1992, and Jan.-June 1993

(Quantity=silicon-content short tons, value=1,000 dollars, unit values, unit labor costs, and unit COGS are per silicon-content short ton, period changes=percent, except where noted)

Item	Reported data			Jan.-June--		Period changes			Jan.-June
	1990	1991	1992	1992	1993	1990-92	1990-91	1991-92	1992-93
U.S. consumption quantity:									
Amount	356,547	312,205	334,536	180,742	172,766	-6.2	-12.4	+7.2	-4.4
Producers' share 1/	59.3	60.8	48.0	43.9	51.4	-11.3	+1.5	-12.8	+7.5
Importers' share: 1/									
Brazil	11.2	6.2	15.8	13.5	23.0	+4.6	-5.1	+9.7	+9.5
Egypt	.6	0	1.3	2.4	0	+0.7	-0.6	+1.3	-2.4
Subtotal	11.8	6.2	17.1	15.9	23.0	+5.3	-5.6	+11.0	+7.1
China	.9	1.1	.8	0	2/	-0.1	+0.1	-0.3	3/
Former U.S.S.R.	5.2	5.7	10.1	18.6	0	+4.9	+0.5	+4.4	-18.6
Venezuela	7.2	10.6	7.7	8.2	4.8	+0.5	+3.3	-2.8	-3.4
Subtotal	25.2	23.5	35.7	42.8	27.8	+10.6	-1.7	+12.3	-15.0
Other sources	15.5	15.8	16.3	13.3	20.8	+0.8	+0.2	+0.5	+7.5
Total	40.7	39.2	52.0	56.1	48.6	+11.3	-1.5	+12.8	-7.5
U.S. consumption value:									
Amount	293,465	239,840	249,661	130,228	132,072	-14.9	-18.3	+4.1	+1.4
Producers' share 1/	62.6	63.8	52.9	49.3	55.9	-9.7	+1.2	-11.0	+6.6
Importers' share: 1/									
Brazil	10.5	4.8	13.7	11.5	19.3	+3.2	-5.7	+8.9	+7.7
Egypt	.9	0	.8	1.5	0	-0.1	-0.9	+0.8	-1.5
Subtotal	11.4	4.8	14.5	13.1	19.3	+3.1	-6.6	+9.7	+6.2
China	.7	1.0	.7	0	2/	3/	+0.3	-0.3	3/
Former U.S.S.R.	4.9	5.2	8.9	17.1	0	+4.0	+0.3	+3.7	-17.1
Venezuela	5.3	8.7	6.0	6.5	3.7	+0.8	+3.5	-2.7	-2.7
Subtotal	22.2	19.7	30.2	36.7	23.1	+8.0	-2.5	+10.4	-13.6
Other sources	15.1	16.4	16.9	14.0	21.1	+1.8	+1.3	+0.5	+7.1
Total	37.4	36.2	47.1	50.7	44.1	+9.7	-1.2	+11.0	-6.6
U.S. imports from--									
Brazil:									
Imports quantity	40,010	19,259	52,994	24,474	39,760	+32.5	-51.9	+175.2	+62.5
Imports value	30,874	11,454	34,232	15,028	25,433	+10.9	-62.9	+198.9	+69.2
Unit value	$772	$595	$646	$614	$640	-16.3	-22.9	+8.6	+4.2
Ending inventory qty	14,574	6,206	2,113	10,055	10,696	-85.5	-57.4	-66.0	+6.4
Egypt:									
Imports quantity	2,085	0	4,292	4,292	0	+105.9	-100.0	4/	-100.0
Imports value	2,556	0	2,008	2,008	0	-21.4	-100.0	4/	-100.0
Unit value	$1,226	4/	$468	$468	4/	-61.8	4/	4/	4/
Ending inventory qty	***	***	***	***	***	***	***	***	***
Brazil and Egypt:									
Imports quantity	42,095	19,259	57,286	28,766	39,760	+36.1	-54.2	+197.5	+38.2
Imports value	33,430	11,454	36,239	17,036	25,433	+8.4	-65.7	+216.4	+49.3
Unit value	$794	$595	$633	$592	$640	-20.3	-25.1	+6.4	+8.0
Ending inventory qty	***	***	***	***	***	***	***	***	***
China:									
Imports quantity	3,324	3,324	2,716	0	14	-18.3	0	-18.3	3/
Imports value	2,010	2,442	1,722	0	57	-14.3	+21.5	-29.5	3/
Unit value	$605	$735	$634	4/	$4,056	+4.8	+21.5	-13.7	4/
Former U.S.S.R.:									
Imports quantity	18,578	17,710	33,687	33,687	0	+81.3	-4.7	+90.2	-100.0
Imports value	14,363	12,485	22,299	22,299	0	+55.3	-13.1	+78.6	-100.0
Unit value	$773	$705	$662	$662	4/	-14.4	-8.8	-6.1	4/
Venezuela:									
Imports quantity	25,708	32,969	25,793	14,867	8,288	+0.3	+28.2	-21.8	-44.3
Imports value	15,416	20,964	15,083	8,459	4,952	-2.2	+36.0	-28.1	-41.5
Unit value	$600	$636	$585	$569	$597	-2.5	+6.0	-8.0	+5.0
Brazil, Egypt, China, former U.S.S.R., and Venezuela:									
Imports quantity	89,705	73,262	119,483	77,320	48,062	+33.2	-18.3	+63.1	-37.8
Imports value	65,219	47,345	75,343	47,794	30,443	+15.5	-27.4	+59.1	-36.3
Unit value	$727	$646	$631	$618	$633	-13.3	-11.1	-2.4	+2.5

Table continued. Footnotes at end of table.

Table C-1--*Continued*
Ferrosilicon: Summary data concerning the U.S. market, 1990-92, Jan.-June 1992, and Jan.-June 1993

(Quantity=silicon-content short tons, value=1,000 dollars, unit values, unit labor costs, and unit COGS are per silicon-content short ton, period changes=percent, except where noted)

	Reported data					Period changes			
				Jan.-June--					Jan.-June
Item	1990	1991	1992	1992	1993	1990-92	1990-91	1991-92	1992-93
U.S. imports from--									
Other sources:									
Imports quantity	55,413	49,220	54,549	24,107	35,944	-1.6	-11.2	+10.8	+49.1
Imports value	44,451	39,366	42,264	18,255	27,836	-4.9	-11.4	+7.4	+52.5
Unit value	$802	$800	$775	$757	$774	-3.4	-0.3	-3.1	+2.3
All sources:									
Imports quantity	145,118	122,481	174,032	101,427	84,006	+19.9	-15.6	+42.1	-17.2
Imports value	109,670	86,711	117,607	66,049	58,278	+7.2	-20.9	+35.6	-11.8
Unit value	$756	$708	$676	$651	$694	-10.6	-6.3	-4.5	+6.5
U.S. producers'--									
Average capacity quantity	283,303	275,498	268,210	132,314	133,135	-5.3	-2.8	-2.6	+0.6
Production quantity	225,011	186,591	172,257	82,208	85,929	-23.4	-17.1	-7.7	+4.5
Capacity utilization 1/	78.3	64.8	64.2	62.1	64.5	-14.1	-13.5	-0.6	+2.4
U.S. shipments:									
Quantity	211,429	189,724	160,504	79,315	88,760	-24.1	-10.3	-15.4	+11.9
Value	183,795	153,129	132,054	64,179	73,794	-28.2	-16.7	-13.8	+15.0
Unit value	$882	$842	$823	$809	$831	-6.8	-4.5	-2.3	+2.7
Export shipments:									
Quantity	9,659	10,230	7,628	2,637	2,569	-21.0	+5.9	-25.4	-2.6
Exports/shipments 1/	4.4	5.1	4.5	3.2	2.8	+0.2	+0.7	-0.6	-0.4
Value	11,251	10,252	7,361	2,915	2,731	-34.6	-8.9	-28.2	-6.3
Unit value	$1,424	$1,385	$965	$1,105	$1,063	-32.2	-2.7	-30.3	-3.8
Ending inventory quantity	50,712	40,177	44,214	40,440	40,598	-12.8	-20.8	+10.0	+0.4
Inventory/shipments 1/	22.9	20.1	26.3	24.7	22.2	+3.4	-2.8	+6.2	-2.4
Production workers	936	779	716	678	752	-23.5	-16.8	-8.1	+10.9
Hours worked (1,000s)	1,951	1,412	1,387	673	783	-28.9	-27.6	-1.8	+16.3
Total comp. ($1,000)	35,995	27,376	28,608	13,101	14,799	-20.5	-23.9	+4.5	+13.0
Hourly total compensation	$16.93	$17.31	$18.64	$17.55	$17.20	+10.1	+2.3	+7.6	-1.9
Productivity (silicon-content short tons per 1,000 hours)	100.7	112.6	105.1	103.6	93.3	+4.4	+11.8	-6.6	-10.0
Unit labor costs	$159.97	$146.72	$166.08	$159.36	$172.22	+3.8	-8.3	+13.2	+8.1
Net sales--									
Quantity	234,221	197,205	173,160	92,275	100,907	-26.1	-15.8	-12.2	+9.4
Value	203,235	163,487	139,328	74,499	83,353	-31.4	-19.6	-14.8	+11.9
Cost of goods sold (COGS)	201,665	167,272	143,052	77,311	83,700	-29.1	-17.1	-14.5	+8.3
Gross profit (loss)	1,570	(3,785)	(3,724)	(2,812)	(347)	-337.2	-341.1	+1.6	+87.7
SG&A expenses	11,426	8,391	8,992	4,430	4,715	-21.3	-26.6	+7.2	+6.4
Operating income (loss)	(9,856)	(12,176)	(12,716)	(7,242)	(5,062)	-29.0	-23.5	-4.4	+30.1
Capital expenditures	8,667	6,289	5,758	2,112	2,954	-33.6	-27.4	-8.4	+39.9
Unit COGS	$861	$848	$826	$838	$829	-4.1	-1.5	-2.6	-1.0
COGS/sales 1/	99.2	102.3	102.7	103.8	100.4	+3.4	+3.1	+0.4	-3.4
Op.income (loss)/sales 1/	(4.8)	(7.4)	(9.1)	(9.7)	(6.1)	-4.3	-2.6	-1.7	+3.6

1/ "Reported data" are in percent and "period changes" are in percentage-point.
2/ Positive figure, but less than significant digits displayed.
3/ An increase of less than 0.05 percentage points.
5/ Not applicable.

Note.--Period changes are derived from the unrounded data. Period changes involving negative period data are positive if the amount of the negativity decreases and negative if the amount of the negativity increases. Because of rounding, figures may not add to the totals shown. Part-year inventory ratios are annualized.

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

APPENDIX D

COMMENTS RECEIVED FROM U.S. PRODUCERS ON THE IMPACT OF IMPORTS OF FERROSILICON FROM BRAZIL AND EGYPT ON THEIR GROWTH, INVESTMENT, ABILITY TO RAISE CAPITAL, AND/OR EXISTING DEVELOPMENT AND PRODUCTION EFFORTS

The Commission requested U.S. producers to describe any actual or anticipated negative effects of imports of ferrosilicon from Brazil and Egypt on their growth, investment, ability to raise capital, or existing development and production efforts, including efforts to develop a derivative or more advanced version of the product. *** did not respond. The remaining responses are presented below.

Actual Negative Effects

* * * * * * *

Anticipated Negative Effects

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APPENDIX E

PRICING DATA FOR IMPORTS OF FERROSILICON FROM VENEZUELA

Table E-1
Net weighted-average U.S. f.o.b. selling prices and quantities of imported Venezuelan ferrosilicon, by products, by types of customers, and by quarters, Oct. 1992-June 1993

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