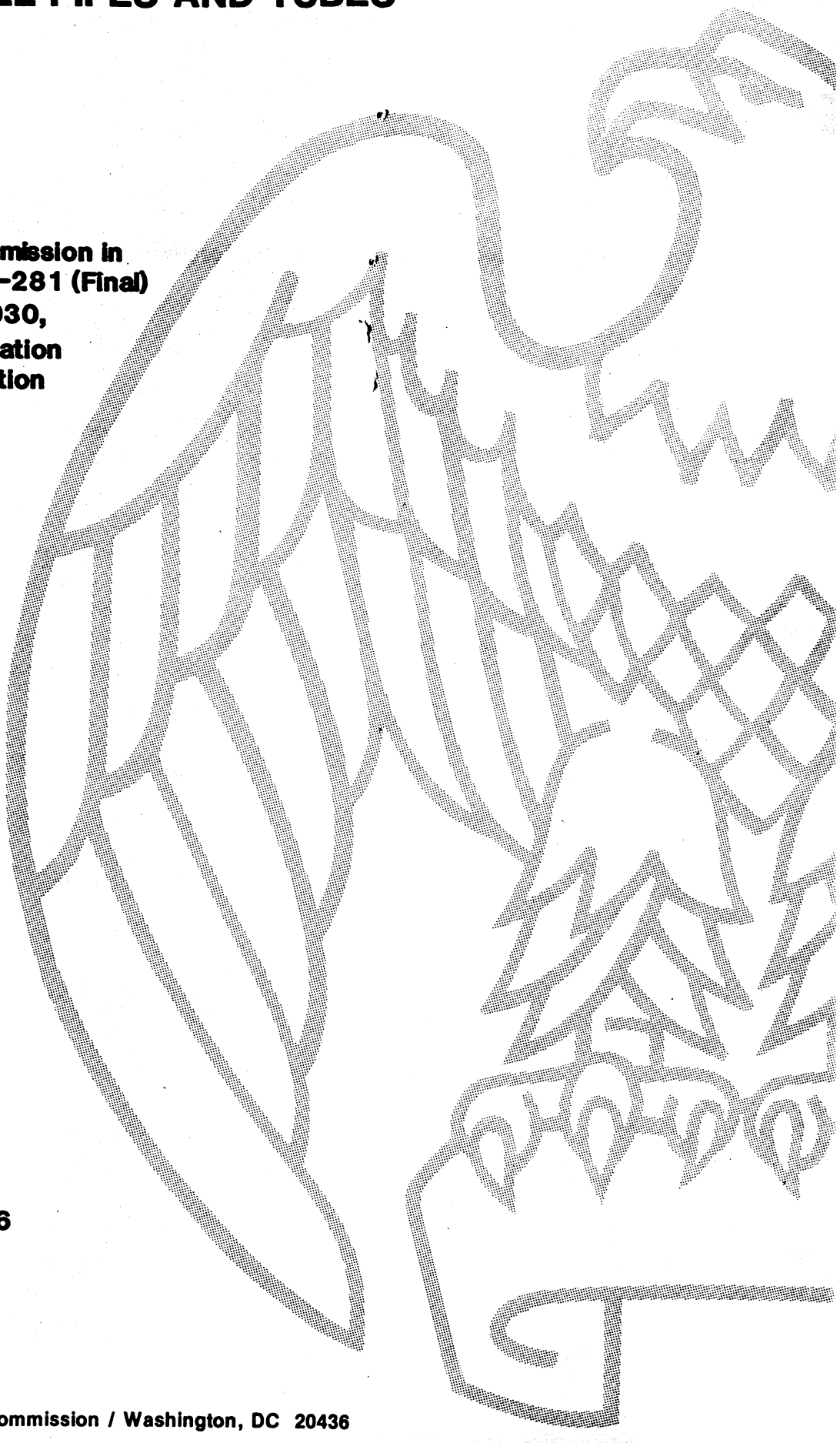
STAINLESS STEEL PIPES AND TUBES FROM SWEDEN

Determination of the Commission in Investigation No. 701-TA-281 (Final) Under the Tariff Act of 1930, Together With the Information Obtained in the Investigation



USTIC PUBLICATION 1966

APRIL 1987

United States International Trade Commission / Washington, DC 20436

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Note.--Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted from this report. Such deletions are indicated by asterisks.

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, DC

Investigation No. 701-TA-281 (Final)

Stainless Steel Pipes and Tubes from Sweden

Determinations

On the basis of the record 1/ developed in the subject investigation, the Commission unanimously determines, pursuant to section 705(b) of the Tariff Act of 1930 (19 U.S.C. § 1671d(b)), that an industry in the United States is 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 Sweden of seamless stainless steel pipes, tubes, hollow bars, and blanks therefor, all of the foregoing of circular cross section, provided for in items 610.51 and 610.52 of the Tariff Schedules of the United States (TSUS). The Commission further determines 2/ 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 Sweden of welded stainless steel pipes, tubes, and blanks therefor, all of the foregoing of circular cross section, provided for in TSUS items 610.37 and 610.52, that have been found by the Department of Commerce to be subsidized by the Government of Sweden.

1/ The record is defined in sec. 207.2(i) of the Commission's Rules of Practice and Procedure (19 CFR § 207.2(i)).
2/ Commissioners Eckes and Lodwick determine that an industry in the United States is materially injured by reason of imports from Sweden of welded stainless steel pipes and tubes that have been found by the Department of Commerce to be subsidized by the Government of Sweden.

Background

The Commission instituted this investigation effective December 5, 1986, following a preliminary determination by the Department of Commerce that imports of certain stainless steel hollow products from Sweden were being subsidized within the meaning of section 701 of the Act (19 U.S.C. § 1671). 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 of December 29, 1986 (51 F.R. 46946). The hearing was held in Washington, DC, on February 26, 1987, and all persons who requested the opportunity were permitted to appear in person or by counsel.

VIEWS OF CHAIRMAN LIEBELER, VICE CHAIRMAN BRUNSDALE, AND COMMISSIONER ROHR

We determine that industries in the United States are not materially injured, nor threatened with material injury, by reason of subsidized imports of welded and seamless stainless steel pipes and tubes from Sweden. 1/ 2/

Data provided in this final investigation indicate that although the performance of the domestic welded stainless steel pipe and tube (welded pipe and tube) industry remains weak, this performance has consistently improved throughout the period of investigation. Furthermore, we have found an insufficient causal nexus between imports from Sweden and the condition of the domestic industry. Although the subject imports have increased, Swedish market penetration has remained low. In addition, the Swedish share of total U.S. imports has decreased. Finally, during the period in which the subject imports were increasing, the financial performance of the domestic welded pipe and tube industry has steadily improved and prices have remained relatively stable.

On February 26, 1987, the Department of Commerce (Commerce) found subsidies with respect to the Swedish producer of welded pipe and tube, Avesta Sandvik AB (Avesta), but found de minimis subsidies with respect to the only Swedish producer of seamless stainless steel pipe and tube (seamless pipe and tube), AB Sandvik Steel (Sandvik). Because, as a factual matter, there are no

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1/ Material retardation is not an issue in this investigation and will not be discussed further.

2/ Commissioner Eckes and Commissioner Lodwick determine that an industry in the United States is materially injured by reason of subsidized imports of welded stainless steel pipes and tubes from Sweden. See their Dissenting Views, infra.

subsidized imports of seamless pipe and tube in this final investigation, the Commission determines that the domestic seamless pipe and tube industry is not experiencing, nor is threatened with, material injury by reason of imports of subsidized seamless pipe and tube from Sweden. 3/

Like product/domestic industry

In a final title VII investigation, the Commission must define the relevant domestic industry. The term "industry" is defined in section 771(4)(A) of the Tariff Act of 1930 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." 4/ In turn, "like product" is defined 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 . . . ." 5/ The Commission is required to make its "like product" and "domestic industry" determination on a case-by-case basis.

3/ Commissioner Eckes and Commissioner Lodwick concur in the determination with respect to seamless pipe and tube. They also concur with the majority's definition of like product and domestic industry.

4/ 19 U.S.C. § 1677(4)(A).

5/ 19 U.S.C. § 1677(10). The Commission has also noted the legislative history of the like product definition, which provides in pertinent part:

> The requirement that a product be 'like' the imported article should not be interpreted in such a narrow fashion so as to permit minor differences in physical characteristics or uses to lead to the conclusion that the product and article are not 'like' each other, nor should the definition of 'like product' be interpreted in such a fashion as to prevent consideration of an industry adversely affected by the imports under investigation.

S. Rep. No. 249, 96th Cong., 1st Sess. 90-91 (1979).

The imported products subject to this final investigation are stainless steel pipe and tube. 6/ 7/ Stainless steel pipe and tube can be divided into two general categories--welded and seamless--depending on the method of manufacture. Seamless pipe and tube are generally used in situations where greater strength and reliability is required and are more expensive, commanding a premium of from 10 to 40 percent according to some purchasers, 8/ and from 15 to 112 percent according to price data collected by the Commission. 9/ Although seamless pipe and tube can be used for most applications calling for welded pipe and tube, the opposite is not generally true. Therefore, the distinct physical characteristics of each product make them suitable for somewhat different uses. 10/ More importantly, any

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6/ The article subject to an investigation is defined by the scope of the investigation initiated by Commerce which in this case covers "certain stainless steel hollow products including pipes, tubes, hollow bars, and blanks therefor, of circular cross-section, containing over 11.5 percent chromium by weight, provided for in items 610.3701, 610.3727, 610.3731, 610.3741, 610.3742, 610.5130, 610.5202, 610.5229, 610.5230, and 610.5231 of the Tariff Schedules of the United States Annotated." 52 Fed. Reg. 5795 (Feb. 26, 1987).

7/ The Commission has investigated stainless steel pipe and tube imports from Sweden on two prior occasions. See Stainless Steel Pipes and Tubes from Sweden, Inv. No. 701-TA-281 (Preliminary), USITC Pub. 1903 (Oct. 1986), and Stainless Steel Pipes and Tubes from Sweden, Inv. 731-TA-354 (Preliminary), USITC Pub. 1919 (Dec. 1986).

8/ Report of the Commission (Report) at A-64 and A-68-A-69.

9/ Id. at A-48 and Appendix D.

10/ The present case is different from our determinations in previous oil country tubular goods (OCTG) investigations. In those investigations the evidence showed a high degree of interchangeability that was not present here. See Oil Country Tubular Goods from Canada and Taiwan, Invs. Nos. 701-TA-255 and 731-TA-276-277 (Final), USITC Pub. 1865 (June 1986); Oil Country Tubular Goods from Israel, Invs. Nos. 701-TA-271 and 731-TA-318 (Preliminary), USITC Pub. 1840 (Apr. 1986); Oil Country Tubular Goods from Brazil, Korea, and Spain, Invs. Nos. 701-TA-215-217 (Final), USITC Pub. 1633 (Jan. 1985); Oil Country Tubular Goods from Austria, Romania, and Venezuela, Invs. Nos. 701-TA-240-241 and 731-TA-251 (Preliminary), USITC Pub. 1679 (Apr. 1985); and Oil Country Tubular Goods from Argentina and Spain, Invs. Nos. 731-TA-191, 195 (Final), USITC Pub. 1694 (May 1985).

operational interchangeability is further limited commercially because the seamless product is significantly more expensive than the welded product. 11/ In addition, seamless and welded pipe and tube are manufactured in separate production facilities and by distinct production techniques. 12/ We thus find that welded and seamless pipe and tube are separate like products. 13/

An issue that has arisen with respect to welded pipe and tube in the instant investigation and the preliminary phase of both the countervailing duty and antidumping investigations is whether articles containing between 10 and 11.5 percent chromium (primarily grade 409) are like the imported articles. 14/ Avesta argued that the lower grade 409 pipe and tube are considered stainless steel pipe and tube by the American Society for Testing and Materials, the domestic industry in general and Commerce in its Current Industrial Reports. 15/ In considering this issue we found that grade 409 is physically different from the higher grade products in that it has a lower chromium content and is of lower quality; that grade 409 pipe and tube are primarily limited to the production of automotive exhaust systems; and that

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11/ Report at A-48 and A-97.

12/ Id. at A-11. We also note that data collected in this investigation indicate that the narrowing of the price differential between the welded and seamless product observed in the preliminary investigation was greatly exaggerated and that relative prices between the two products have remained nearly constant. Id. at Appendix D, Note to Table D-1.

13/ Vice Chairman Brunsdale notes that although she agrees with the like product determination of her colleagues in this final investigation, she believes that the record has not adequately answered the question of whether welded and seamless pipes are one like product or whether they are separate like products. She notes that petitioners argued in the preliminary investigation that there was only one like product. They subsequently changed their view and argued that there were two. In any event, the Vice Chairman's decision in this case would not have been affected had she adopted one like product instead of two.

14/ Report at A-4-A-6.

15/ Tr. at 84-85.

grade 409 pipe and tube are made primarily by a distinct group of companies, of which only a limited number replied to the Commission's questionnaires. Finally, a large proportion of grade 409 does not enter into the open market, but is consumed internally by companies that are essentially fabricators of automotive exhaust systems. 16/ Although it is a close question, the Commission has determined to continue its past practice in this regard and not include articles containing between 10 and 11.5 percent chromium within the like product definition. 17/

Another issue that has arisen in the instant investigation, as well as in the preliminary investigations, is whether to include redrawers of pipe and tube in the domestic industry. 18/ In the preliminary determinations, the Commission determined that redrawers were part of the domestic industry. Among the factors we considered in those investigations were physical characteristics of the redrawn product, complexity and costs of processing, and interchangeability. As in the preliminary case, we find that: facilities involved in the latter stages of production of the like product are generally considered part of the domestic industry, the activities of the redrawers in cold working the pipe are very similar to the cold-working activities performed by integrated producers, and redrawers add approximately 50 percent

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16/ Report at A-6. Chairman Liebeler does not find the captive consumption distinction meaningful.

17/ Vice Chairman Brunsdale does not agree that grade 409 pipe should be excluded from the like product. These pipes are produced using the same equipment and process as other welded pipe. Tr. at 47. However, she notes that the record contains very little information about this product (e.g., shipments, production, and financial results of producers). Therefore, her analysis relies on the data discussed by her colleagues.

18/ Report at A-4. A redrawer is a company that purchases a hollow tube (i.e., a redraw hollow) and cold works it, reducing the outside diameter and wall thickness.

in value to the product they are producing. 19/ Thus, we again determine that redrawers of pipe and tube are part of the domestic industry.

The Commission, therefore, concludes that there is one domestic welded pipe and tube industry consisting of: (1) companies that melt stainless steel, produce basic shapes used in pipe and tube production, and subsequently manufacture welded pipe and tube (i.e., integrated companies); (2) companies that purchase basic shapes--generally stainless steel sheet and strip--on the market, and then manufacture welded pipe and tube; and (3) redrawers.

Condition of the domestic welded pipe and tube industry

In determining the condition of a domestic industry, the Commission considers, among other factors, domestic consumption, U.S. production, capacity, capacity utilization, shipments, inventories, employment, and profitability. 20/

Data provided for the domestic welded pipe and tube industry show that, while it remains in a weakened condition, its performance significantly improved. Although we have reservations, we nonetheless have found material

19/ Id. at A-13.
20/ 19 U.S.C. § 1677(7)(C)(iii).

injury. [21/] Furthermore, we have made our assessment on the condition of the domestic industry as a whole, but we must note a sharp divergence of performance between integrated and nonintegrated producers. Nonintegrated producers have shown steadily improving performance both in net sales and operating income, moving from a small loss in 1983 to increasing profits through 1985 and into 1986. [22/] In contrast, integrated producers have had steadily decreasing net sales throughout the period. The operating losses have declined but still remain significant enough to cause the industry as a whole to show a net loss despite the fact that integrated producers account for approximately 20 percent of the industry. [23/] Finally, we must note our

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21/ Vice Chairman Brunsdale has severe reservations about the finding that the domestic welded industry is materially injured. She notes, for example, that production, shipments, capacity, and capacity utilization either were steady or else increased during the period of investigation. Report at A-18 (Table 3), A-19 (Table 4). Furthermore, manhours worked, adjusted for productivity increases, were also steady over this same period. Id. at A-22 (Table 6). Finally, the financial performance of the industry as a whole showed steady improvement from 1983 through interim 1986. Id. at A-29.

There is also a possible problem with the financial data. There is a marked contrast between the financial performance of the integrated and nonintegrated firms--the former did much more poorly than the latter. For example, in 1986 the nonintegrated firms were profitable while the integrated firms were unprofitable. Id. at A-29. However, the record in this case does not have information about transfer pricing policies used by the integrated firms, i.e., how they set prices for raw materials (e.g., stainless steel strip) they produce in their rolling mills and send to their pipe and tube mills. The record does, however, indicate that the ratio of cost of goods sold to sales is considerably higher for integrated firms. Thus, it is possible that they do not use market prices to value their intracompany transfers of strip and instead set values for such transfers that are higher than market prices. If this is the case, then the financial performance of the integrated producers on their welded pipe and tube operations is understated.

Based on the record in this case, the Vice Chairman cannot reach a conclusion about transfer prices. But examining the total performance of the industry, she does not find that the industry is materially injured. However, assuming the industry to be materially injured, she proceeds to analyze the issue of causation.

22/ Report at A-29.

23/ Id. at A-12.

concern that the companies not reporting specific financial data were nonintegrated companies and that statements provided by several of these companies indicated that most were profitable. 24/ We have recognized in previous investigations some divergence in performance between integrated and nonintegrated producers but found, as we do here, material injury existing for the industry as a whole. 25/ However, in this case it is a much closer question due to the fact that integrated producers account for relatively less of the domestic industry and the nonintegrated producers are performing substantially better. A somewhat greater divergence of performance or less relative significance of the integrated producers may have resulted in a different conclusion here.

Nevertheless, although the unavailable data might change the financial performance results and despite improving performance trends, we find that the industry as a whole is still suffering material injury. We reach this conclusion on the basis not only of the financial data, but also on the slight decline in production in 1986, 26/ the somewhat sharper decline in shipments in 1986, 27/ the corresponding increase in inventories, 28/ and the generally low rate of capacity utilization throughout the period of investigation. 29/ Furthermore, employment, hours worked, wages paid and total compensation also declined throughout the period. 30/

24/ Id. at A-23.
25/ See, e.g., Certain Welded Carbon Steel Pipes and Tubes from the People's Republic of China, Inv. No. 731-TA-292 (Final), USITC Pub. 1885 at 7 (1986); Oil Country Tubular Goods from Israel, Invs. Nos. 701-TA-271 (Final) and 731-TA-318 (Final), USITC Pub. 1952 at 8 (1987).
26/ Report at A-18.
27/ Id. at A-19-A-20.
28/ Id. at A-21.
29/ Id. at A-18.
30/ Id. at A-21-A-22.

Thus, although the domestic industry's financial performance during the period of investigation improved, other industry indicators remained very weak. Accordingly, we conclude that the domestic welded pipe and tube industry is materially injured. 31/

No threat of material injury by reason of imports of subsidized welded pipes and tubes from Sweden

In determining whether there is a reasonable indication of a threat of material injury, the Commission considers, among other factors, (1) any rapid increase in market penetration of the imports and the likelihood that such penetration will reach an injurious level, (2) any substantial increase in inventories of the imported product, (3) the likelihood of increased imports in the future because of increased capacity or existing underutilized capacity in the foreign country, and (4) the probability that future imports will have a price depressing or suppressing effect in the domestic market. 32/ The Commission must also find that the threat is real and injury is imminent. 33/ The record does not contain such evidence of a real and imminent threat to the domestic industry from imports of welded pipe and tube from Sweden.

Initially, we note that Commerce found no export subsidies. 34/ Furthermore, the Swedish industry, though export oriented, 35/ is currently operating at a quite high rate of capacity utilization. 36/ The high

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31/ See the Additional Views of Chairman Liebeler, Vice Chairman Brunsdale, and Commissioner Rohr regarding causation.
32/ 19 U.S.C. § 1677(7)(F)(i).
33/ 19 U.S.C. § 1677(7)(F)(ii); see also S. Rep. No. 249, 96th Cong., 1st Sess. 89 (1979).
34/ 52 Fed. Reg. 5794 (Feb. 26, 1987).
35/ Report at A-40-A-41.
36/ Id.

capacity utilization is not surprising considering that the Swedish welded pipe and tube industry recently underwent a substantial reorganization beginning in 1979, in part to reduce overcapacity. Indeed, the subsidies found by Commerce relate to the industry reorganization. 37/ Swedish capacity has recently increased again somewhat; however, the capacity utilization has risen at an even faster rate. 38/

We also find it significant that the United States has traditionally represented a quite small share of the Swedish export market for welded pipe and tube. 39/ Considering that the Swedish krona has appreciated relative to the U.S. dollar in real terms, 40/ it is unlikely that the United States will become a more attractive market in the future if this trend continues. 41/ This is highlighted by a change in marketing strategy by Avesta. Avesta has rapidly decreased its U.S. inventories and plans to begin marketing directly from Sweden. 42/ This may increase the problems discussed above with respect to long lead times for purchasers' orders, thereby making Swedish imports even less of a potential threat. Also, the marketing strategy is not one that would normally be adopted by a company

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37/ 52 Fed. Reg. at 5797-98.
38/ Report at A-40-A-41.
39/ Id.
40/ Id. at A-61-A-62.
41/ We also note that there is no meaningful evidence of a potential for production shifting between welded and seamless pipe and tube. Id. at A-6-A-7. Even though the drawing equipment of the two Swedish companies, Sandvik (seamless producer) and Avesta (welded producer), can be utilized to redraw either welded or seamless hollows, the equipment used to produce the welded and seamless hollows themselves is not interchangeable. Because Avesta is the only welded producer and is already operating at virtually full capacity and thus has no extra welded hollows to sell, there is no potential for Sandvik to also become a supplier of welded pipe and tube.
42/ Id. at A-40.

planning to rapidly increase sales and market share. Furthermore, the primary export markets for Swedish pipe and tube are Western European countries with currencies appreciating relative to the U.S. dollar [43/] and to which Sweden has duty free access by reason of membership in the European Free Trade Association thereby increasing the relative attractiveness of those markets. Finally, we note that, although there has been an increase in Swedish imports in both absolute and relative terms during the period of investigation, these increases are relative to a very low level of market share in 1983 and remain at a low level in 1986. In such a context, and unaccompanied by other factors indicating further increases, this increase in imports from Sweden is insufficient to support an affirmative threat determination. Thus, we find that there is no real and imminent threat of material injury by reason of imports of welded pipe and tube from Sweden.

43/ Id. at A-41.

ADDITITIONAL VIEWS OF CHAIRMAN LIEBELER

Stainless Steel Pipes and Tubes from Sweden

Inv. No. 701-TA-281 (Final)

I determine that industries in the United States are not materially injured or threatened with material injury by reason of subsidized imports of stainless steel pipes and tubes from Sweden.[1]

In the preliminary investigation, I found that that seamless and welded stainless steel pipes and tubes constituted one like product and that there was one domestic industry consisting of the producers of the like product. After considering the additional pricing data gathered during this final investigation, I have reconsidered this determination.[2] I now join with the

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[1] Since there are established domestic industries producing stainless steel pipes and tubes, material retardation is not an issue in this case.

[2] See Views of the Commission, supra.

majority in finding two like products and two domestic industries. I also join the majority's discussion of condition of the industry and threat of material injury. Because my views on causation differ, I offer these additional views.[3]

Material Injury by Reason of Imports

In order for a domestic industry to prevail in a final investigation, the Commission must determine that the dumped or subsidized imports cause or threaten to cause material injury to the domestic industry producing the like product. First, the Commission must determine whether the domestic industry producing the like product is materially injured or is threatened with material injury. Second, the Commission must determine whether any injury or threat thereof is by reason of the dumped or subsidized imports. Only if the Commission answers both questions in the affirmative, will it make an affirmative determination in the investigation.

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[3] As stated in the majority opinion, no subsidies were found with respect to seamless pipes and tubes and so no material injury could be by reason of subsidized imports.

Before analyzing the data, however, the first question is whether the statute is clear or whether one must resort to the legislative history in order to interpret the relevant sections of the antidumping law. The accepted rule of statutory construction is that a statute, clear and unambiguous on its face, need not and cannot be interpreted using secondary sources. Only statutes that are of doubtful meaning are subject to such statutory interpretation.[4]

The statutory language used for both parts of the two-part analysis is ambiguous. "Material injury" is defined as "harm which is not inconsequential, immaterial, or unimportant."[5] As for the causation test, "by reason of" lends itself to no easy interpretation, and has been the subject of much debate by past and present commissioners. Clearly, well-informed persons may differ as to the interpretation of the causation and material injury sections of title VII. Therefore, the legislative history becomes helpful in interpreting title VII.

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[4] C. Sands, Sutherland Statutory Construction, § 45.02 (4th ed. 1985).

[5] 19 U.S.C. § 1677(7)(A)(1980).

The ambiguity arises in part because it is clear that the presence in the United States of additional foreign supply will always make the domestic industry worse off. Any time a foreign producer exports products to the United States, the increase in supply, ceteris paribus, must result in a lower price of the product than would otherwise prevail. If a downward effect on price, accompanied by a Department of Commerce dumping or subsidy finding and a Commission finding that financial indicators were down were all that were required for an affirmative determination, there would be no need to inquire further into causation.

But the legislative history shows that the mere presence of LTFV imports is not sufficient to establish causation. In the legislative history to the Trade Agreements Acts of 1979, Congress stated:

> [T]he ITC will consider information which indicates that harm is caused by factors other than the less-than-fair-value imports.[6]

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[6] Report on the Trade Agreements Act of 1979, S. Rep. No. 249, 96th Cong. 1st Sess. 75 (1979).

The Senate Finance Committee emphasized the need for an exhaustive causation analysis, stating, "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."[7]

The Finance Committee acknowledged that the causation analysis would not be easy: "The determination of the ITC with respect to causation, is under current law, and will be, under section 735, complex and difficult, and is a matter for the judgment of the ITC."[8] Since the domestic industry is no doubt worse off by the presence of any imports (whether LTFV or fairly traded) and Congress has directed that this is not enough upon which to base an affirmative determination, the Commission must delve further to find what condition Congress has attempted to remedy.

In the legislative history to the 1974 Act, the Senate Finance Committee stated:

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7 Id.

8 Id.

> This Act is not a 'protectionist' statute designed to bar or restrict U.S. imports; rather, it is a statute designed to free U.S. imports from unfair price discrimination practices. * * * The Antidumping Act is designed to discourage and prevent foreign suppliers from using unfair price discrimination practices to the detriment of a United States industry.[9]

Thus, the focus of the analysis must be on what constitutes unfair price discrimination and what harm results therefrom:

> [T]he Antidumping Act does not proscribe transactions which involve selling an imported product at a price which is not lower than that needed to make the product competitive in the U.S. market, even though the price of the imported product is lower than its home market price.[10]

This "complex and difficult" judgment by the Commission is aided greatly by the use of economic and financial analysis. One of the most important assumptions of traditional microeconomic theory is that firms attempt

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[9] Trade Reform Act of 1974, S. Rep. 1298, 93rd Cong. 2d Sess. 179.

[10] Id.

to maximize profits.[11] Congress was obviously familiar with the economist's tools: "[I]mporters as prudent businessmen dealing fairly would be interested in maximizing profits by selling at prices as high as the U.S. market would bear."[12]

An assertion of unfair price discrimination should be accompanied by a factual record that can support such a conclusion. In accord with economic theory and the legislative history, foreign firms should be presumed to behave rationally. Therefore, if the factual setting in which the unfair imports occur does not support any gain to be had by unfair price discrimination, it is reasonable to conclude that any injury or threat of injury to the domestic industry is not "by reason of" such imports.

In many cases unfair price discrimination by a competitor would be irrational. In general, it is not rational to charge a price below that necessary to sell

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11 See, e.g., P. Samuelson & W. Nordhaus, Economics 42-45 (12th ed. 1985); W. Nicholson, Intermediate Microeconomics and Its Application 7 (3rd ed. 1983).

12 Trade Reform Act of 1974, S. Rep. 1298, 93rd Cong. 2d Sess. 179.

one's product. In certain circumstances, a firm may try to capture a sufficient market share to be able to raise its price in the future. To move from a position where the firm has no market power to a position where the firm has such power, the firm may lower its price below that which is necessary to meet competition. It is this condition which Congress must have meant when it charged us "to discourage and prevent foreign suppliers from using unfair price discrimination practices to the detriment of a United States industry."[13]

In Certain Red Raspberries from Canada, I set forth a framework for examining what factual setting would merit an affirmative finding under the law interpreted in light of the cited legislative history.[14]

> The stronger the evidence of the following . . . the more likely that an affirmative determination will be made: (1) large and increasing market share, (2) high dumping margins, (3) homogeneous products, (4) declining prices and (5) barriers

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13 Trade Reform Act of 1974, S. Rep. 1298, 93rd Cong. 2d Sess. 179.

14 Inv. No. 731-TA-196 (Final), USITC Pub. 1680, at 11-19 (1985) (Additional Views of Vice Chairman Liebeler).

to entry to other foreign producers (low elasticity of supply of other imports).[15]

The statute requires the Commission to examine the volume of imports, the effect of imports on prices, and the general impact of imports on domestic producers.[16] The legislative history provides some guidance for applying these criteria. The factors incorporate both the statutory criteria and the guidance provided by the legislative history.

Causation analysis

Examining import penetration is important because unfair price discrimination has as its goal, and cannot take place in the absence of, market power. The market penetration of imports of the welded pipes and tubes under investigation increased from 1.9 percent in 1983 to 4.1 percent in 1986.[17] Import penetration is in a very low range and is not consistent with a finding of unfair price discrimination.

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15 Id. at 16.

16 19 U.S.C. § 1677(7)(B)-(C) (1980 & cum. supp. 1985).

17 Report at Table 21.

The second factor is a high margin of dumping or subsidy. The higher the margin, ceteris paribus, the more likely it is that the product is being sold below the competitive price[18] and the more likely it is that the domestic producers will be adversely affected. The subsidy margin determined by the Department of Commerce in this case was 2.18 percent ad valorem. This margin is very low and is not consistent with a finding of unfair price discrimination.

The third factor is the homogeneity of the products. The more homogeneous the products, the greater will be the effect of any allegedly unfair practice on domestic producers. The evidence gathered during this investigation indicates that purchasers find the quality of the domestic and imported products to be similar, although some purchasers stated that the domestic product was superior.[19] Purchasers indicated that that domestic producers enjoyed advantages with respect to lead time and

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[18] See text accompanying note 10, supra.

[19] Report at A-60, 63-69.

reliability of supply.[20] Thus, many purchasers were willing to pay a premium for domestic pipe and tube. Overall, however, the products are generally substitutable.

As to the fourth factor, evidence of declining domestic prices, ceteris paribus, might indicate that domestic producers were lowering their prices to maintain market share. Domestic prices for welded pipes and tubes were up slightly over the period of investigation.[21]

The fifth factor is foreign supply elasticity (barriers to entry). If there is low foreign elasticity of supply (or barriers to entry) it is more likely that a producer can gain market power. The import penetration ratio for countries other than Sweden was significant and increased sharply from 1983 to 1985.[22] Based on this information, one would normally conclude that barriers to entry to other countries are low. Voluntary restraint agreements are in effect with respect to carbon steel and

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[20] Report at A-60.

[21] Report at Table 22.

[22] Report at Table 21.

certain specialty steel products, including stainless steel pipes and tubes. However, none of the VRAs contain a specific import limitation on stainless steel pipes and tubes. Thus, these VRAs, while effecting the elasticity of supply of other foreign producers of stainless steel pipes and tubes, are not a strong entry barrier yet.

These factors must be considered in each case to reach a sound determination. Market share is in the very low range. The subsidy margin is low. Prices are slightly rising. The VRAs may restrict supply responsiveness but they are not a barrier to entry for this product in their current form. These factors are all inconsistent with a finding of unfair price discrimination.

Conclusion

Therefore, I conclude that industries in the United States are not materially injured or threatened with material injury by reason of subsidized imports of stainless steel pipes and tubes from Sweden.

ADDITIONAL VIEWS OF VICE CHAIRMAN ANNE E. BRUNSDALE

Stainless Steel Pipes and Tubes from Sweden
Investigation 701-TA-281 (Final)

April 3, 1987

I find that the domestic stainless steel pipe and tube industry is not materially injured or threatened with material injury by reason of imports from Sweden. I concur with my colleagues in the majority regarding the following issues in this case: like product, domestic industry, condition of industry, and threat of material injury.[1] I offer these additional views to explain my analysis of causation.

In determining whether the domestic industry is materially injured "by reason of" subsidized imports, the Commission is to consider, among other factors, the volume of the imports subject to investigation and the effect of these imports on prices for the like product and on the domestic industry.[2]

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[1] As explained in note 21 in the majority opinion, I have grave reservations about the finding that the domestic industry is materially injured in this case. However, assuming material injury, I proceed to the issue of causation.

[2] 19 U.S.C. sec. 1677(7)(B).

In this investigation it is clear that imports from Sweden are not a cause of material injury to the domestic industry. One indicator of the lack of a significant causal relationship is the fact that the financial condition of the domestic industry has steadily improved even though imports from Sweden have increased their market share. This strongly suggests that whatever effects subsidized imports may have had, they have not had a material effect on the domestic industry.

Subsidized imports also have not had a significant effect on domestic prices. Domestic producer prices of several products actually increased when prices of the Swedish products declined,[3] and domestic prices remained relatively stable when import prices fluctuated.[4]

The lack of a close relationship between domestic and import prices is due, in part, to long lead times, large order sizes, and large inventory requirements associated with importing the Swedish product. This means that there is not a one-for-one price effect caused by sales of the subject imports. That is, a discount of one dollar offered by an importer will not translate

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[3] Report at A-55, Table 23.

[4] Id.

into a one dollar impact on domestic prices.[5] This low price-induced substitutability is even further accentuated by the low market share of the subject imports and by the low subsidy rate in this case.

The import penetration of the subject imports increased but was relatively low throughout the period of investigation.[6] In 1983, Swedish welded pipe and tube accounted for only 1.9 percent of domestic consumption. In 1986, the ratio increased to 4.1 percent.[7] With such small penetration ratios the subject imports would have a significant effect on domestic prices only if domestic demand and domestic supply were both highly insensitive to price. In this case available evidence indicates that domestic supply is moderately sensitive to price, not highly

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5 See e.g., Posthearing submission of Freeman, Wasserman and Schneider at 13-17 (Mar. 5, 1986).

6 For a discussion of the role of the import penetration in assessing harm to a domestic industry, see Memorandum from the Office of Economics, EC-J-010 (January 7, 1986), at 29-31.

7 While the Commission's data base was the best available and represents an estimated 85 percent of domestic shipments, not all domestic producers responded to the questionnaire, thereby resulting in an understatement of domestic shipments. Therefore, Swedish imports actually accounted for less than 1.9 percent of domestic consumption in 1983 and actually rose to somewhat less than 4.1 percent in 1986.

insensitive to price.[8]

The subsidy rate in this case also indicates that the subject imports would not have a significant effect on domestic prices.[9] The rate found by Commerce is very low, only 2.18 percent ad valorem. At a maximum, the adverse effects on domestic prices from such a subsidy rate is 2.18 percent. For this maximum to be achieved, it is necessary for the imported product and the domestic product be perfect substitutes. As I have explained above, the two products are not expected to be perfect substitutes. Accordingly, the adverse effect on domestic prices is very small, considerably less than 2 percent.

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[8] Memorandum from the Office of Economics, EC-K-111, at 4 (March 24, 1987).

[9] The recent opinion of the Court of International Trade in Hyundai Pipe Co., Ltd., et al. v. U.S. International Trade Commission, et al., Slip Opinion 87-18 (February 23, 1987), makes clear that it is appropriate for the Commission to consider the magnitude of the subsidy or dumping margin in assessing causation. Indeed, there is substantial support in the legislative history for the proposition that the Commission should consider the subsidy or dumping margin in every case. The House Report to the Trade Act of 1979 states: "for one type of product, price may be the key factor in determining the amount of sales elasticity, and a small price differential resulting from the amount of the subsidy or the margin of dumping can be decisive; in others the margin may be of lesser significance." H. Rep. 317, 96th Cong., 1st Sess. 47 (1979) (emphasis added). The Senate Report contains almost identical language. S. Rep. No. 249, 96th Cong., 1st Sess. 88 (1979). See also H.R. Rep. No. 317 at 55; S. Rep. No. 249 at 57-58.

Finally, I note that the nonintegrated U.S. producers have shown particularly significant improvements in both net sales and operating income at the same time as imports from Sweden increased and prices of some Swedish products declined.[10] Even assuming that there was material injury to the industry as a whole, including both integrated and nonintegrated producers, I cannot ignore the difference in performance when assessing the impact of imports from Sweden.[11] If the imports from Sweden were a cause of material injury, I would expect similar trends from both types of domestic producers. The divergent trends indicate that other factors were responsible for the adverse condition of the domestic industry as a whole, factors peculiar to the integrated producers.

Based on the foregoing analysis I determine that imports of welded stainless steel pipes and tubes from Sweden are not a cause of material injury to the domestic industry.

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[10] Report at A-29.

[11] The data on financial performance is incomplete. The firms that did not respond to the questionnaire were nonintegrated producers and indications are that they were generally profitable. Thus, the disparity in performance was likely more marked than indicated in the Report. Id.

Additional Views of Commissioner David B. Rohr on Causation.

This investigation of the welded stainless steel pipe and tube industry is not the first occasion on which the Commission has been called upon to evaluate the impact of pipe and tube imports on domestic pipe producers. In many of the recent past investigations involving the domestic pipe and tube industry, I have found improvements in the performance of the specific industry, but concluded that the level of improvement was insufficient to justify a finding of no injury. 1/ In many of those investigations I found that unfairly traded foreign imports were a cause of the material injury to the domestic industry, or alternatively that, in the context of a vulnerable industry, imports posed a real and imminent threat of material injury. However, I have required that, regardless of the injury finding, there be sufficient evidence of a causal nexus between any such injury and the imported product under investigation. In the instant investigation, although I find that the domestic industry continues to experience material injury, I do not find that this injury is by reason of the subject imports from Sweden.

1/ In previous decisions, I have maintained that a finding of material injury should not be based on any fixed period of improvement nor on any given minimum level of profitability. *See* Certain Welded Carbon Steel Pipes and Tubes from the Philippines and Singapore Inv. Nos. 731-TA-293, 294, 296 (Final), USITC Pub. 1907 (November 1986) at 9, "There is no established minimum period of improved performance by which to determine whether such 'recovery' has occurred. However, the data in these investigations indicate that the industry has experienced an established trend of improved performance. Considering the trend and its timing relative to the existence of the subject imports, we find no causal nexus between the imports and the condition of the domestic industry, nor do we find that imports threaten the domestic industry."

In making this determination I considered, as the Commission is statutorily required to do, the volume of imports, the effect of these imports on domestic prices, and the impact of imports on domestic producers of the like product. In analyzing the significance of the volume of imports, I considered both their absolute volume and their volume in relation to the market. In examining the effect of imports on prices, I considered both domestic and import price trends and the underselling that occurred in the market. To evaluate the impact of imports on the domestic industry, I considered both the volume and price of imports in the context of the market conditions during the period of investigation.

Of particular significance to me in analyzing the conditions of the market is the structure and performance of the domestic industry. Given the current levels of output and profitability, the overall performance of the domestic welded stainless steel pipe and tube industry does warrant a finding of material injury. With respect to causation, however, the qualitative dimensions of this performance, the degree and breadth of injury, the structure of the industry, and the conditions of competition present in this investigation have a demonstrable effect on market conditions. When the subject imports are considered in the context of these conditions, no causal nexus is established.

The current performance of the industry thus directly affects the way in which causation must be analyzed. As I noted recently, "The Commission's analysis must be based on what is actually happening in the market, at the time it makes its determination." 2/ Causation must be

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2/ Cold-Rolled Carbon Steel Plates and Sheets from Argentina, Inv. No. 731-TA-175 (Final-Court Remand) Views of Commissioner Rohr at 66 (*Argentine Steel*).

analyzed specifically in the context of the trends in industry performance during the period of investigation and will be analyzed differently if this performance is improving or deteriorating. 3/

The welded stainless steel pipe and tube industry has not attained the levels of performance experienced before its 1982 declines. However, during the period of investigation, domestic production, capacity utilization, and shipments demonstrated improved performance. 4/ Furthermore, during the period under investigation the industry made tremendous and continuous financial gains, with gross profits nearly tripling from $4.7 million to $13 million, and operating income margins rising from negative 7.7% to 1.5%. 5/ These conditions differ from those of similar industries in previous investigations where the Commission found material injury characterized by fluctuating or worsening performance. 6/

3/ This does not mean that an improving industry cannot be materially injured by imports or that a deteriorating industry is always affected by imports. The Commission must analyze what actually happened, not what is theoretically possible to have happened. I merely make what I believe to be an obvious point, that the volume price and marketing of imports may have different effects in each situation.

4/ *See* Views of Chairman Liebeler, Vice Chairman Brunsdale, and Commissioner Rohr, supra at 8-9.

5/ The financial data in this investigation are understated, as discussed below , pp 10 -11, supra. This understatement is due to the extraordinary circumstances in the operation of the industry and limitations on our information gathering that affected our reported data.

6/ *See* Stainless Steel Sheet and Strip from Spain, Inv. No. 731-TA-164 (Final) USITC Pub. 1593 at 20 (October 1984)(*Spanish Steel*)(The Commission found the industry in an "accelerating downturn.") In Certain Welded Carbon Steel Pipes and Tubes from the People's Republic of China,

(Footnote continued on next page)

It is in the context of these conditions that I have examined the role of imports. The first element in my analysis involves the volume of imports. There was an increase in both the absolute volume of Swedish imports and their share of the U.S. market between 1983 and 1986. Swedish market share increased from 2% to 4% of total domestic consumption. 7/ This increase is certainly not insignificant, but it must be considered in the context of the many changes that occurred in the market over the period of the investigation.

Throughout the period of investigation, domestic consumption of welded stainless steel pipes and tubes increased by more than 8000 tons, while Swedish imports increased 1600 tons. Although the increase in Swedish import volume over the period of investigation was nearly 20% of the increase in domestic consumption for this period, as a percentage of total U.S. imports, those from Sweden decreased. Thus, while the significance of Swedish imports was increasing according to some volume measures, it was relatively small and even decreased by other measures.

There is no question that import volumes, such as those in this investigation, *could* adversely affect an industry to the extent that they are a cause of material injury. However, I am not directed to find

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(Footnote continued from previous page)
Inv. No. 731-TA-292 (Final) USITC Pub. 1885 at 7(August 1986), the Commission noted that "one quarter of improved performance is not sufficient to indicate the economic recovery of this long-depressed industry." In the instant investigation, by comparison, the industry has demonstrated four years of significant improvement.

7/ In this investigation, the market share of Swedish imports is overstated. The Commission was able to obtain less than 85% of the domestic industry shipment data. Thus the market share of Swedish imports is at least 15% lower than stated.

whether imports *could have had* such an effect, but rather whether they *did* have such an effect. The relevant consideration is whether the actual volume of imports in a given investigation, on a particular industry and under the prevailing market conditions, has caused material injury. There is no threshold volume which defines this causal relationship.

The second element in my analysis is a consideration of the effect of imports on domestic prices. The price data collected during the investigation provide only an incomplete picture of pricing trends, but, given the available data, Swedish imports were not a price leader in the domestic welded stainless steel pipe and tube industry. In fact, as discussed below, Swedish imports had no discernable effect on domestic prices between 1983 and 1986.

Domestic prices remained relatively stable throughout the period under investigation. Neither the Swedish import prices nor the U.S. product prices showed any consistent trend upward or downward. Both sets of prices increased and decreased during the period under investigation, but did not show any clear relationship to each other. In the one product category for which price trend comparisons were possible, the prices of the U.S. product increased by almost 4% from January 1985 through September 1986, while prices of the Swedish product fluctuated but generally remained above their initial period value. The price index for the domestic product then fell by about 5% in the last quarter of 1986. However, the price of the comparable Swedish imports increased during this same quarter. This absence of any price trend relationship between the Swedish imports and the domestic product was also found in

other product classes where more limited price data were available. Consequently, I find no evidence to support the conclusion that lower priced Swedish imports had a significant negative effect on domestic prices.

I have also considered underselling in order to discover evidence of possible price effects from the sale of the Swedish imports. Swedish imports did consistently undersell the U.S. product. Absent corroborative inferences from other factors, such as the price trends discussed above, underselling is, at best, a limited indicator of causation. Further, given the available data in this investigation, I have given relatively less weight to underselling than to other factors. 8/ As I noted in *Argentine Steel*:

> Price comparisons will be better and entitled to greater weight when: (a) there are a greater number of comparisons; (b) the transactions are more representative, i.e. there are many transactions in each comparison, there are uniform conditions, such as geography and purchasers, and there are more nearly identical products being compared. 9/

In this investigation, there were a limited number of price comparisons for any one product category, and significant differences were found between prices in various geographic regions. Finally, although the domestic product and the imported product are relatively

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8/ *See* Maine Potato Council v U.S., 613 F. Supp. 1237, 1244 (1985). *See also* S. Rep. 349, 96th Cong., 1st Sess. 88 ("the significance to be assigned to a particular factor is for the ITC to decide"); and H.R. Rep. 317, 96th Cong., 1st Sess. 46 (1979)(the significance of the various factors will depend on the facts of each case).

9/ *Argentine Steel* at 67-68.

fungible within given grades and sizes, there are customer preferences and lead time differences, as discussed below, that support a price premium for the domestic good and partially limit the commercial interchangeability of the foreign and domestic products. These considerations do not negate the validity of price comparisons, but suggest that their importance in this investigation is relatively less than in other investigations where the factors I applied in the Argentine Steel decision were stronger.

Furthermore, our investigation of the petitioner's lost sales and revenue allegations were inconclusive in establishing any price effect. The Commission staff was able to contact purchasers involved in four of the petitioner's lost sales allegations and in one of the petitioner's lost revenue allegations. Three of these five allegations involved the same purchaser. In two, this purchaser could not recall making the specified purchase, although he did admit that Swedish imports were one (although not the major) of his sources of supply, and that if the purchase had been made it would have been because of the lower price of such imports. In the other two lost sales allegations the purchasers did admit to purchasing because of a lower price. These allegations did not involve a significant percentage of sales of the Swedish product. Although the lost sales allegations in this investigation represent the strongest argument for an impact as a result of imports, in light of the other factors I have considered these allegations are insufficient to establish the requisite causal nexus.

Our investigation of lost sales and revenues provides additional information which I consider critical in an analysis of the role of

imports -- the degree of head-on commercial competition between the Swedish product and the domestic product. Although the products are generally comparable in quality, important differences in order-lead-times significantly reduce the substitutability of the imported product for the domestic product. In addition, factors such as "buy America" provisions, customer loyalty, and reliability of supply shape customer preferences and limit the market for the Swedish product. These differences suggest that there is a strong preference for the domestic product and a limit to the ability of Swedish imports to have an injurious impact on the U.S. industry.

The limited commercial interchangeability between the subject imports and the domestic product also curtails the extent to which domestic purchasers will rely on Swedish imports for supply. In addition, the longer lead times associated with the Swedish product require domestic purchasers to maintain large inventories at a higher cost. Further, the purchaser's need for assured supply of pipes and tubes as a raw material appears more important than minor differences in price between suppliers. Finally, none of the purchasers contacted by the Commission staff was an exclusive purchaser of Swedish imports, nor were Swedish imports the major source of their supply. All relied primarily on domestic producers and considered Swedish imports as a supplementary source.

In the final analysis, however, it is neither the volume nor the price effect of imports in the abstract that establishes a causal nexus, but whether they have had a material impact on the performance of the industry. Despite the underselling and increases in both import volume

and market penetration of the Swedish product, the domestic industry has continued to improve significantly. This fact must be relevant to any causation analysis. In a previous steel investigation, the Commission concluded:

> It is our view that, absent other significant evidence of causation,...market penetration is insufficient to support a finding of material injury by reason of...imports...in the context of current conditions facing the domestic...industry." 10/

Further, when considered within the context of the relatively small volumes of imports from Sweden, the underselling in this investigation was insufficient to injuriously impact domestic producers.

Each of the major indicies of domestic industry financial performance increased throughout the investigation. Net sales of the domestic product decreased between 1983 and 1984, but then increased between 1984 and 1985. Comparing the interim periods ending September 30 of 1985 and 1986, net sales continued to increase. Throughout the period of investigation, and into the interim period, the cost of goods sold as a percentage of net sales (COGS margin) declined. The general, selling, and administrative expenses as a percentage of net sales (GSA margin) fluctuated, both increasing and decreasing during the period of investigation. Changes in this margin may partially account for lower domestic industry profitability. Nonetheless, throughout the investigation period gross profits, net operating income, and operating income as a percentage of net sales (operating income margin) increased consistently. In addition, the asset valuation of the domestic industry

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10/ Cold-Rolled Carbon Steel Sheet From Brazil, Inv. No. 731-TA-154 (Final), USITC Pub. 1579 at 7 (September 1984).

and the ratio of operating income to gross assets both increased between 1983 and 1986. During the interim period both the operating income margin and the ratio of operating income to assets turned positive for the first time since before 1983.

I find also that these advances are understated due to the nature and quantity of the data obtained in this investigation. In past investigations, the Commission has noted a significant distinction between the performance of the integrated producers' operations and the performance of the non-integrated producers' operations. In each instance, the operations of the non-integrated producers as a group were substantially more profitable than those of the integrated producers. The Commission has acknowledged this disparity but recognized it would not be proper to consider financial improvements in a small part of the industry as justification for conclusions applicable to the industry as a whole. The situation in this investigation differs.

In previous steel investigations a majority, or a near majority, of the industry comprised integrated producers. In the current investigation, integrated producers comprise a rapidly declining portion of industry shipments, in 1986, accounting for only 21% of the industry, 11/ and the performance of this 20% has been substantially worse than that of the non-integrated segment of the industry. The net sales of the integrated producers declined by nearly 18% between 1983 and 1985, compared to an 8% increase for the non-integrated producers which

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11/ This data is further overstated by at least 15% due to the incomplete data of the non-integrated producers.

reported data to the Commission. Operating income and operating margins increased for both types of producers. However, the non-integrated began to show profits in 1984, while the integrated producers were still marginally negative at the end of the period of investigation. Nonetheless, despite the inferior performance of the integrated producers, both integrated and non-integrated producers showed consistent improvement in income throughout the period. 12/

I have stopped short of concluding that the domestic industry as a whole, the majority of which is non-integrated companies that are turning profits, is not injured. However, I must note that this is an extremely close question. 13/ Regarding causation, I find that the poor performance of the integrated producers is not representative of the majority of the domestic industry and that the performance of the integrated producers distorts the overall profitability of the industry. When the industry is viewed as a whole, taking into account this differential performance, it is clear that the unfairly traded imports from Sweden were not a cause of material injury.

12/ The Commission was only able to obtain financial data for an estimated 70% of the industry (20% of which is integrated production data). The missing 30% is composed entirely of non-integrated producer's data. It is reasonable to assume that these non-reporting non-integrated producers performed similar to the non-integrated producers which did report to the Commission. The financial performance of the industry, therefore, is significantly understated. Furthermore, I infer from the failure of the remaining 30% non-integrated producers to comply with the Commission investigation a tacit indifference to the allegations of the petitioners concerning Swedish imports.

13/ I do not suggest that simply because the domestic industry is now profitable, it is precluded from demonstrating that is nonetheless materially injured. However, as the Commission noted in *Spanish Steel*, "We need not finally decide the issue of whether or not this industry has recovered and is no longer experiencing material injury because we have ultimately determined that petitioners have not demonstrated that any injury is by reason of imports from Spain." *Id.* at 9.

DISSENTING VIEWS OF COMMISSIONER ECKES AND COMMISSIONER LODWICK ON WELDED STAINLESS STEEL PIPES AND TUBES FROM SWEDEN

We respectfully disagree with the Commission majority and determine that an industry in the United States is materially injured by reason of imports of subsidized welded stainless steel pipes and tubes from Sweden. This finding is based upon the steady rise in volume and market share of the imports from Sweden, evidence of price undercutting by the imports, and the weak performance of the domestic industry as a whole during the period of investigation.

Condition of the Industry

From 1983 to 1985, most performance indicators for the domestic welded stainless steel pipe and tube industry trended upward from a relatively low base, a trend that reversed in 1986. The moderate upturn reflected an increase in domestic consumption. Consumption rose almost 16 percent between 1983 and 1985, and then fell 2.3 percent in 1986. Production rose 10.9 percent between 1983 and 1985, and then fell 1.9 percent in 1986.

Industry capacity grew 1.6 percent from 1983 to 1986. Capacity utilization, however, remained below 60 percent throughout the investigation period, rising from 52.1 percent in 1983 to 58.4 percent in 1985, and then dropping to 55.8 percent in 1986.

Domestic shipments followed a similar though weaker upward trend in 1983-1985, rising at less than half the rate of the production increase. Furthermore, shipments experienced a sharper decline of 7 percent in 1986, and were at a lower level in 1986 than in 1983. As might be expected from the shipments figures, inventories rose each year. There was a particularly large inventory increase in 1986, both in volume and as a percent of shipments.

The number of employees, hours worked, hourly wages and total compensation declined over the investigation period. Most firms reported minor layoffs during the period, and 2 firms reported large permanent reductions in workforce.

The financial performance of the domestic industry differed according to whether producers were integrated or nonintegrated. The nonintegrated producers experienced increasing sales throughout the investigation period and increasing operating profits. Their operating margin rose from a loss of 0.6 percent in 1983 to a small 3.7 percent profit in 1985. The operating margin in interim 1986 rose to 5.2 percent, compared to 4.1 percent in the comparable 1985 period.

The integrated producers, on the other hand, had steadily decreasing sales and experienced substantial losses throughout the period. Operating losses ranged from 19.5 percent in 1983, to 11.9 percent in 1984, and 12.6 percent in 1985. The losses lessened in the interim comparison (from 12.0 percent in 1985 to 9.9 percent in 1986) but this slight improvement, as well as the interim upturn for the nonintegrated producers, appears to be largely the result of cost reductions in interim 1986.

To assess the financial performance of the domestic welded stainless steel pipe industry as a whole, the Commission examined aggregate industry data which show a decrease in sales from 1983 to 1985, and then a slight 0.4 percent increase in interim 1986 compared to interim 1985. Operating losses decreased from 7.7 percent in 1983 to 1.9 percent in 1984 and 1.3 percent in 1985. A small profit of 1.5 percent was reached in interim 1986 compared to a loss of 0.1 percent in interim 1985. However, the level of interim 1986 operating income did not even offset estimated losses in the fourth quarter of 1985.1/ The number of firms reporting operating losses grew in the interim 1985-1986 comparison from 3 to 4 out of 8 firms.

We find that domestic welded stainless steel pipe industry was weak throughout the period of investigation, and many performance indicators deteriorated in 1986. Therefore the domestic industry is experiencing material injury.

Causation

To determine whether the subject unfair imports are a cause of material injury to the domestic industry, the Commission considers, among other factors, the volume of the imports, the effect of the imports on prices in the United States, and the impact of the imports on domestic producers of the like product.

1/ Estimated losses in fourth quarter 1985 are derived by subtracting interim 1985 operating loss from full-year 1985 loss. See report Table 10 at A-30.

As there is only one Swedish producer exporting welded stainless steel pipe to the United States, Swedish industry data is confidential. However, it can be noted that Swedish capacity, capacity utilization, and production increased throughout the investigation period. Imports of the product also increased steadily, rising nearly 145 percent between 1983 and 1986.

Market penetration by the imports from Sweden grew from 1.9 percent in 1983, to 4.1 percent in 1986. The domestic industry lost market share throughout the investigation period, and it appears that roughly a fifth of that market share loss was captured by imports from Sweden.2/

In 27 out of 30 price comparisons made by the Commission, Swedish pipe was priced lower than the domestic by an average of about 9 percent. Delivered prices of the Swedish product were substantially below the domestic in the Eastern and Western markets.

Avesta, the Swedish producer of welded stainless pipes, appears to be an aggressive competitor whose pricing policies undercut domestic prices. Pricing data suggest that Avesta cut prices in 1986 when domestic producers were trying (largely unsuccessfully) to raise prices, and thereby contributed to the suppression of domestic prices.3/

2/ Table 21, Report at A-47.
3/ Table 22, Report at A-53 for importer price indices and Tables 23 and 24 at A-55 and A-56 for purchaser prices.

Purchaser contacts generally confirmed the low prices and aggressive policies of the Swedish company. One purchaser volunteered that the Swedish producer has a philosophy of "get market share at any price." 4/ Perhaps the most convincing evidence of aggressive pricing is the increasing volume and penetration of the Swedish imports.

Price suppression was another result of the Swedish pricing policies, and this suppression obviously affected domestic industry profits. The Commission obtained a complete quarterly price series for sales to distributors of only one domestic welded pipe specification. This shows domestic prices fluctuating, but rising only about 2 percent between 1983 and 1986.5/ This is a very small price rise in a period of increasing demand for stainless steel welded pipe. Rather than raise prices, one domestic producer testified that it had to absorb a significant portion of shipping costs to compete with the Swedish imports.6/

The President's program of voluntary restaint arrangements should have improved the competitive posture of the domestic industry. Sweden, however, has not negotiated a VRA. Increasing volumes of subsidized imports from Sweden have entered the market at prices domestic producers are unable to meet. The Commission confirmed that many of the alleged lost sales were awarded to the Swedish producer on the basis of

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4/Report at A-63.
5/ Table 22, Report at A-53.
6/ Hearing testimony page 19-20.

a lower price for a product equal in quality to U.S. pipe.7/

Against such aggressive competition from subsidized Swedish imports, it is not surprising that the domestic industry could not raise prices substantially in response to increased demand and compensate for years of heavy losses. Accordingly, we find that the subsidized imports of welded stainless steel pipe from Sweden are a cause of material injury to the domestic industry.

7/ Report at A-63 through A-69.

INFORMATION OBTAINED IN THE INVESTIGATION

Introduction

Following a preliminary determination by the U.S. Department of Commerce that imports of stainless steel pipes and tubes 1/ from Sweden are being subsidized by the Government of Sweden, 2/ the U.S. International Trade Commission, effective December 5, 1986, instituted investigation No. 701-TA-281 (Final) under section 705(b) of the Tariff Act of 1930 (19 U.S.C. § 1671d(b)) 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 final investigation, and of the 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 December 29, 1986 (51 F.R. 46946). 3/ The hearing was held in Washington, DC, on February 26, 1987. 4/

This investigation results from a petition filed by the Specialty Tubing Group 5/ on September 4, 1986, alleging that an industry in the United States is materially injured or threatened with material injury by reason of subsidized imports of stainless steel pipes and tubes from Sweden. In response to that petition the Commission instituted investigation No. 701-TA-281 (Preliminary) under section 703 of the Tariff Act of 1930 (19 U.S.C § 1671b(a)) and, on October 20, 1986, notified Commerce of its determination that there was a reasonable indication of material injury.

Previous Investigations

The Commission has conducted three other investigations concerning stainless steel pipes and tubes. The first investigation, No. AA1921-180, 6/ covered imports of welded stainless steel pipes and tubes from Japan. The trade complaint was filed on behalf of a group of domestic pipe and tube

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1/ Stainless steel pipes and tubes are provided for in items 610.37, 610.51, and 610.52 of the Tariff Schedules of the United States.
2/ Commerce published its preliminary determination in the Federal Register on Dec. 5, 1986 (51 F.R. 43949). A copy of Commerce's final determination, as published in the Federal Register on Feb. 26, 1987, is presented in app. A.
3/ A copy of the Commission's notice of investigation, as published in the Federal Register on Dec. 29, 1986, is presented in app. A.
4/ A list of witnesses appearing at the public hearing is presented in app. B.
5/ The Specialty Tubing Group consists of the following firms: Al Tech Specialty Steel Corp., Allegheny Ludlum Steel Corp., ARMCO-Specialty Steel Division, Carpenter Technology Corp., Damascus Tubular Products, and Trent Tube Division, Crucible Materials Corp. On Jan. 30, 1987, counsel for the Specialty Tubing Group amended the petition to add the United Steelworkers of America as a copetitioner in the investigation; however, on Feb. 13, 1987, Commerce denied this request based on the untimeliness of the amendment to the petition.

6/ Welded Stainless Steel Pipe and Tube From Japan: Determination of No Injury in Investigation No. AA1921-180 Under the Antidumping Act, 1921, USITC Publication 899, July 1978.

producers. On July 20, 1978, the Commission determined that there was no injury or likelihood of injury as a result of sales of welded pipe and tube from Japan at less than fair value. In the second investigation, No. 731-TA-87 (Final), the Commission examined the impact of imports of certain seamless steel (including stainless) pipes and tubes from Japan. 1/ The petitioner in the investigation was Babcock and Wilcox Co. In February 1983, the Commission made an affirmative determination, which resulted in the issuance of an antidumping order in 1983. The order was revoked effective October 23, 1985, as the result of an import restraint agreement reached with Japan. The most recent investigation, No. 731-TA-354 (Preliminary), 2/ was instituted as a result of a petition filed on October 20, 1986, on behalf of the same group of producers represented in this investigation. On December 4, 1986, the Commission transmitted its determination to the Department of Commerce that there was a reasonable indication that industries in the United States were being injured by reason of imports from Sweden of stainless steel pipes, tubes, hollow bars, and blanks therefor, all the foregoing of circular cross section, whether welded or seamless, which were alleged to be sold at less than fair value.

The Product

Description and uses

The stainless steel pipes and tubes subject to this investigation include both welded and seamless products of circular cross section. 3/ The terms "pipes" and "tubes" are generally used interchangeably. However, some industry publications consider pipes to be products produced in large quantities in a few standard sizes and tubes to be products made to customers' specifications for dimensions, finish, chemical composition, and mechanical properties. According to these sources, pipes are normally used as conduits for liquids or gases, whereas tubes are generally used for load-bearing or mechanical purposes. Pipes and tubes are generally produced according to standards and specifications published by a number of organizations, including the American Society for Testing and Materials (ASTM) and the American Society of Mechanical Engineers (ASME).

1/ Certain Seamless Steel Pipes and Tubes From Japan: Determination of the Commission in Investigation No. 731-TA-87 (Final), Under the Tariff Act of 1930, USITC Publication 1347, February 1983.

2/ Stainless Steel Pipes and Tubes From Sweden: Determination of the Commission in Investigation No. 731-TA-354 (Preliminary), Under the Tariff Act of 1930, USITC Publication 1919, December 1986.

3/ Stainless steel is an alloy steel that contains by weight less than 1 percent carbon and over 11.5 percent of chromium. The Tariff Schedules of the United States Annotated (TSUSA) provisions covering seamless pipes and tubes of circular cross section also pertain to products of rectangular cross section with wall thicknesses less than 0.156 inch. The market for these products is thought to be very small; representatives of the importers of seamless pipes and tubes testified that there were no imports of such articles from Sweden (Transcript of the public conference in investigation No. 701-TA-281 (Preliminary)(Transcript I), pp. 169-170).

Pipes and tubes are produced to numerous metallurgical and dimensional specifications. The subject products are most commonly used in pressure and mechanical applications. More specifically, stainless steel pipes and tubes are used extensively in applications in which corrosion and heat resistance and high strength-to-weight ratios are important considerations. Typical applications are in heat exchangers, condensers, boilers, feed water heaters, evaporators, separators, stock lines for the petrochemical industry, digestor lines, blow lines, pharmaceutical production lines, food-processing equipment, and sanitary tubing for the dairy industry. Stainless steel tube is also used in ornamental applications such as decorative tubing for automobiles, seating for cars and buses, hand railings, furniture, hospital equipment, and display racks. Small tubes, generally less than 3/8 inch in diameter, are used in the manufacture of medical and dental instruments (e.g., needles), specialized machinery parts, and electrical and electronic components.

In the preliminary investigation there was sharp disagreement on the extent of the overlap in the end uses for seamless and welded stainless steel pipes and tubes. Petitioners testified that in the size ranges in which both seamless and welded pipes and tubes are produced, there is approximately 95-percent overlap on total volume of sales, i.e., customers can use either product. Respondents argued that price and technical differences are principal reasons why seamless and welded pipes and tubes are not commercially interchangeable. 1/ Petitioners contend that as wall thicknesses increase, the differences between seamless and welded production methods not only disappear, but that in some instances welding becomes the more costly method. 2/ In the present investigation, petitioners have focused on the impact of subsidized imports of welded stainless steel pipes and tubes on domestic producers of that product. Petitioners base their shift to a "two like product" analysis on the Commerce determination, which effectively limits its subsidy finding to welded stainless steel pipes and tubes, and the findings of a majority of the Commission in both the preliminary countervailing duty and antidumping investigations that seamless and welded stainless steel pipes and tubes constitute two like products. 3/ Seamless pipes and tubes are more commonly used in demanding applications that require exceptional strength, high pressure containment, and a great degree of reliability. Traditional applications for seamless stainless steel pipes and tubes are in nuclear power plants, conventional power plants, certain oil and gas tubing, and certain uses within the pulp and paper industry. 4/ Welded pipes and tubes are more commonly used to transport liquids at atmospheric pressure. 5/

1/ Transcript I, pp. 72, 117, and 147-149.
2/ Postconference brief of the Specialty Tubing Group in investigation No. 731-TA-354 (Preliminary), app. C, pp. 1-2.
3/ Prehearing brief of the Specialty Tubing Group, p. 3 and transcript of the public hearing in investigation No. 701-TA-281 (Final)(Transcript II), pp. 50-51.
4/ Transcript I, p. 147.
5/ Transcript I, p. 121.

The seamless stainless steel pipes and tubes produced in the United States and imported from Sweden include two distinct product forms--hollow bars and redraw hollows. Hollow bar, which is also referred to in the market as mechanical tubing, is a tubular product characterized by a high ratio of wall thickness to outside diameter (OD). 1/ The product is sold to parts machiners that machine the tubing into flanges, fittings, or valves. Estimates of the size of the U.S. market for hollow bar range from 2,500 to 4,500 short tons per year. 2/

In investigation No. 701-TA-281 (Preliminary), representatives of Sandvik, the exclusive importer of Swedish seamless redraw hollows, referred to redraw hollows as semifinished products. This designation was challenged in investigation No. 731-TA-354 (Preliminary) by petitioners, who contend that hollows are actually finished products that in most cases are redrawn to smaller dimensions but that could also be used "as is" in final end-use applications. Redraw hollows, however, are most often reduced in size and brought to their final form through cold working that takes place subsequent to their original sale. Sandvik testified that none of its hollows were produced to pipe specifications and, therefore, none could be sold to end users without some further cold working. 3/ Staff conversations with firms that purchase redraw hollows provided mixed responses on this question. 4/ Most firms indicated that they purchased hollows produced to their own specifications rather than standard pipe schedule specifications. There were several firms that had at times purchased stock from distributors that was in fact finished pipe that they then used as redraw material.

As previously noted, the TSUS defines stainless steel as an alloy steel that contains, among other materials, more than 11.5 percent chromium. Data gathered in the preliminary antidumping and countervailing duty investigations included only products meeting this specification. Subsequent to the Commission's institution of the subject investigation, counsel representing Avesta requested in a submission dated December 11, 1986, that stainless steel be defined for purposes of this investigation to comprise material with greater than 10 percent chromium content and that questionnaire data be gathered on this basis. Counsel argued that the U.S. industry, the ASTM, and the Department of Commerce (in its Current Industrial Reports) all recognize stainless steel as any steel that contains more than 10 percent chromium, as well as the required proportions of other materials. The ASTM designations that cover pipes and tubes between 10 percent and 11.5 percent chromium are grades 409 and 422. Counsel further argued that this definitional difference

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1/ Ibid.

2/ Ibid.; also postconference brief of the Specialty Tubing Group in investigation No. 731-TA-354 (Preliminary), app. F.

3/ Transcript of the public conference in investigation No. 731-TA-354 (Preliminary)(Transcript III), pp. 87-88.

4/ The staff conducted fieldwork during the week of Oct. 27, 1986, and a telephone survey during the week of Nov. 10, 1986. All firms known to produce or purchase seamless redraw hollows were contacted and responded to inquiries. Petitioners testified during the public hearing that three producers of welded stainless steel pipes and tubes were actually redrawers that should not be considered part of the domestic industry. The staff contacted all three firms and determined * * *. The remaining firm, ***, was purchased by its current owners * * *. *** confirmed that his firm purchased welded hollows that were then drawn to smaller sizes. * * *. It appears that the bulk of welded redraw hollows are produced by welded pipe and tube producers who then do their own redrawing.

"materially distorts the statistical picture of the U.S. market for stainless steel pipes and tubes and the financial picture of the U.S. producers." This "material distortion" appears to stem from counsel's allegation that one of the petitioning firms produces a "significant" quantity of pipes and tubes in grade 409 or grade 422.

In a submission dated December 19, 1986, counsel for the petitioners urged the Commission to reject the proposal. Counsel argued that collecting data on pipes and tubes made of stainless steel containing between 10 and 11.5 percent chromium would serve no useful purpose in this investigation, and would constitute a departure from the Commission's own precedent. According to counsel for petitioners, the most significant grade of stainless steel containing between 10 and 11.5 percent chromium is grade 409. Counsel stated that tubular products produced from this grade steel are of far lower quality and cost than products containing more than 11.5 percent chromium. Grade 409 tubular products were developed for the automotive exhaust and emission control market and continue to be produced specifically for this unique market. Counsel argued that as a result of these differences in quality and end uses, grade 409 tubular products are not interchangeable with higher quality tubular products made of stainless steel containing more than 11.5 percent chromium. Counsel further contended that the domestic industry does not produce such products to any significant degree, has not suffered material injury with respect to production of such products, and has not experienced any competition from Swedish producers of such products.

The Commission has acknowledged this stainless steel definitional problem in prior investigations under both Title VII of the Tariff Act of 1930 and Section 201 of the Trade Act of 1974. In all such investigations, the TSUS definition was used and products not meeting its chromium specification were not covered. However, an argument could be raised that pipes and tubes in grades 409 and 422 are "like" pipes and tubes containing more than 11.5 percent chromium.

The Commission's questionnaires in the current investigation requested separate data on shipments and profit-and-loss experience for pipes and tubes produced from grades of stainless steel with chromium contents between 10.1 percent and 11.5 percent. Representatives for Avesta and Sandvik reported no import shipments in these grades. Of the 25 domestic producers of the stainless steel pipes and tubes subject to this investigation that responded to the questionnaire, only 4 firms reported such shipments in 1986 (none of the firms was able to provide separate profit-and-loss data because of the small volumes involved). An additional firm, ***, reported in a questionnaire response that * * *. In all cases the products shipped were welded pipes and tubes.

The quantities of such shipments and their shares of total domestic shipments of all welded stainless steel pipes and tubes by the 21 responding producers (including ***) during 1983-86, are shown in the following tabulation:

Year	Domestic shipments (short tons)	Share of total (percent)
1983----------	***	***
1984----------	***	***
1985----------	***	***
1986----------	***	***

The principal grade 409 producers, * * *, reported that shipments of these grades were to automotive parts fabricators, specifically firms producing automotive exhaust systems such as manifolds, tailpipes, and catalytic converters. * * *. The production process is less extensive for these products, essentially requiring only welding and annealing. Other grades of stainless steel are not acceptable for this market although alloy steels other than stainless can also be used.

During the public hearing, witnesses for petitioners testified that substantial volumes of grade 409 tubular products were shipped by a group of producers outside the Specialty Tubing Group. 1/ Reference was made to four companies that petitioners believed accounted for virtually all grade 409 tubing. The staff contacted all four cited firms as well as a fifth producer. It was determined that two of the five firms, *** and ***, produce grade 409 tubing for open market sales. *** provided data in response to the Commission's questionnaire. *** did not respond to inquiries by the Commission's staff; however, a company official indicated that grade 409 tubing represented about *** percent of the firm's sales. * * *. Two other firms, *** and ***, were fabricators of exhaust systems. These firms did produce grade 409 tubing but utilized all of it in the production of finished products. The remaining firm, * * *. ***, president of ***, could recall * * *. *** purchased some grade 430 tubing for sale to the small instrumentation market. Thus, the Commission's staff estimates that domestic shipments of grade 409 tubing in 1986 totaled approximately *** short tons, or *** percent of domestic shipments of all welded stainless steel pipes and tubes over 11.5 percent chromium content.

Manufacturing processes

Seamless stainless steel pipes and tubes.--Seamless pipes and tubes are produced by forming a central cavity in solid steel stock. The central cavity may be formed by rotary piercing and rolling, or by extruding. Rotary piercing and rolling operations produce the bulk of seamless steel (all grades) tubular products. A conditioned steel round of proper grade, diameter, and weight is heated to a suitable forging temperature and rotary pierced in one of several types of mills that work the steel and cause it to flow helically over and around a so-called piercer-point, yielding a seamless hollow billet. This billet is then roller-elongated either in a succession of plug mills or in one of several mandrel mills. Finally, the elongated steel is sized by further rolling without internal support in one or more sizing mills. A tension mill stretches the material between stands and makes wall reduction possible, and a rotary sizing mill frequently is used in conjunction with one of the other mills to do final precision sizing of the outside diameter. 2/

The extrusion process also starts with a conditioned steel round of desired grade, diameter, and weight. This billet may be cold drilled and hot expanded, or hot pierced-punched, either separately or in the extrusion process. The billets are then hot extruded by axially forcing the material through a die and over a mandrel. 3/ The bulk of all U.S. production of seamless stainless steel pipes and tubes is produced through the extrusion process. 4/

1/ Transcript II, pp. 66-68.
2/ The American Iron and Steel Institute, Steel Products Manual: Steel Specialty Tubular Products, October 1980.
3/ Ibid.
4/ Transcript I at p. 76.

After a pipe or tube is pierced and rolled, or extruded, the product is subjected to certain finishing operations that may include straightening, cutting, inspecting, and testing. The product then can be sold as is or it may undergo additional operations such as heat treating, cold drawing, polishing, rough turning, honing, pickling, threading, cold pilgering, and other special treatments.

Welded stainless steel pipes and tubes.--Welded products are usually produced in a continuous process beginning with coils of hot-rolled or cold-rolled sheet, strip, or plate. The coil has usually been annealed and pickled and produced to the dimensional, physical, and compositional limits specified by the pipe and tube producer. The coil is guided through a series of paired forming rolls. As it progresses through these rolls, its cross-sectional profile is changed into a tubular shape with the butted edges ready for welding. After being welded, the tube continues through additional roll sets to size and/or form the tube into its final shape. The finish on the rolls and the condition of the edges are of prime importance in the production of high quality pipe and tube. 1/

U.S. tariff treatment

Imports of the seamless stainless steel pipes and tubes under investigation are classified in TSUS items 610.51 and 610.52 and reported under TSUSA items 610.5130, 610.5202, 610.5229, and 610.5230, which cover seamless tubular products of stainless steel, of circular cross section, including seamless redraw hollows. Imports of the subject welded stainless steel pipes and tubes are classified in TSUS items 610.37 and 610.52 and reported under TSUSA items 610.3701, 610.3727, 610.3731, 610.3741, 610.3742, and 610.5231, which cover welded, jointed, or seamed tubular products of stainless steel, of circular cross section. The following tabulation shows the most-favored-nation (MFN) (col. 1) rates of duty, 2/ (which are the final staged rates negotiated in the Tokyo Round of the Multilateral Trade Negotiations (MTN)), and the column 2 rates of duty 3/ applicable to imports from non-MFN countries for these tariff items (in percent ad valorem):

TSUS item	Col. 1 rate of duty	Col. 2 rate of duty
610.37	4.9 1/	10.0 2/
610.51	7.5 1/	30.0 2/
610.52	7.5 1/	35.0 2/

1/ Additional duties of up to 0.4 percent ad valorem are assessed on imports under this item depending on the content of chromium, molybdenum, tungsten, and vanadium, as provided for in schedule 6, headnote 4, part 2, subpart B.
2/ The additional duty for countries subject to col. 2 rates is 1 percent ad valorem rather than 0.4 percent.

1/ Op. cit., The American Iron and Steel Institute, Steel Products Manual: Steel Specialty Tubular Products, October 1980, p. 22.
2/ The col. 1 rate is applicable to imported products from all countries except those Communist countries and areas enumerated in general headnote 3(d) of the TSUS, except when preferential tariff treatment is sought and granted.
3/ The rate of duty in col. 2 applies to imported products from those Communist countries and areas enumerated in general headnote 3(d) of the TSUS.

No preferential tariff treatment is afforded to products of countries other than Israel (duty-free entry under the U.S.-Israel Free Trade Area Agreement) and beneficiaries of the Caribbean Basin Economic Recovery Act (see TSUS general headnote 3(e)(vii)), whose products enter free of duty.

Import Restraint Program

In July 1984, the Commission reported its findings and recommendations to the President in investigation No. TA-201-51, concerning carbon and certain alloy steel (excluding stainless steel) products. 1/ The Commission determined that imports of certain carbon steel products 2/ were a substantial cause of serious injury, or threat thereof, to certain domestic industries and recommended the imposition of a 5-year program of tariffs and quotas. On September 18, 1984, the President determined that taking "escape clause" action under section 202(b)(1) of the Trade Act of 1974 was not in the national economic interest (49 F.R. 36813). Instead of taking action under the statute, the President established a nine-point policy to address the concerns of the industry. Under this policy, the President directed the United States Trade Representative to negotiate voluntary restraint arrangements (VRAs) to cover a 5-year period (from Oct. 1, 1984, through Sept. 30, 1989) with countries whose exports to the United States had increased significantly in recent years as a result of an unfair surge in imports. These measures were expected to return the share of imports in the U.S. market to a more normal level of approximately 18.5 percent, excluding semifinished steel (which, subsequent administration statements indicate, would be limited to about 1.7 million tons per year).

To date, VRAs have been negotiated with 17 countries and the EC (excluding Portugal and Spain, which negotiated separate agreements). 3/ These agreements cover imports of all carbon steel products and certain specialty steel products, including stainless steel pipes and tubes. With the exception of Brazil, none of the VRAs negotiated to date contain a specific import limitation on stainless steel pipes and tubes. Sweden has not negotiated a VRA. The agreements have taken the form of market share arrangements and quotas, or a combination thereof. The absence of a specific limit on speciality steel products would allow foreign producers to concentrate their exports in higher value per pound items, such as stainless steel pipes and tubes. The agreements are tailored to each country, with considerable variation in the number of individual product categories subject to limitation. Under the terms of the arrangements, the Department of Commerce revoked any existing antidumping or countervailing duty orders, and petitioners withdrew existing petitions and agreed not to file new unfair trade petitions on finished steel products.

1/ Carbon and Certain Alloy Steel Products: Report to the President in Investigation No. TA-201-51 under the Trade Act of 1974, USITC Publication 1553, July 1984.

2/ Affirmative decisions were rendered in the case of semifinished steel, plates, sheets and strip, wire and wire products, and structural shapes and units. Negative determinations were rendered in the case of wire rod, railway type products, bars, and pipes and tubes.

3/ In addition, in December 1986, Taiwan announced a unilateral export restraint of steel products (including stainless steel pipes and tubes) to the United States of 20,000 to 25,000 tons per month through 1987.

The negotiated arrangement level for import penetration for all pipe and tube products, including those under investigation, was 33.2 percent for 1986. The following tabulation shows the specific shares negotiated (on either a percentage or tonnage basis), by country:

Country	1986 Arrangement Level for Pipes and Tubes 1/
Australia	0.16%
Austria	0.044% 2/
Brazil	1.59% 3/
EC(10)	7.60%
Finland	0.10%
Japan	13.26%
Mexico	1.33%
South Africa	0.55%
Republic of Korea	7.67%
Spain	0.89%
Czechoslovakia	6,000 tons 4/
East Germany	6,587 tons 4/
Hungary	15,000 tons 4/
Poland	24,389 tons 4/
Romania	16,808 tons 5/
Venezuela	3,754 tons 6/
Yugoslavia	5,164 tons 4/
Portugal	7/

1/ Data compiled by the U.S. Department of Commerce, August 1986.
2/ This is a "basket" amount, which includes pipes and tubes (except oil country tubular goods (OCTG)) as well as other steel products.
3/ Brazil negotiated a specific import penetration level of 0.40 percent for stainless steel pipes and tubes.
4/ This is a "basket" amount, which includes pipes and tubes, as well as other steel products.
5/ This amount excludes OCTG.
6/ This amount excludes standard pipe, line pipe, and OCTG.
7/ Pipes and tubes are included in the "all other steel products" category, which has an arrangement level of zero. However, Portugal can shift up to 3,000 tons from its "flat rolled products" arrangement level during 1986.

Nature and Extent of Subsidies

In its final determination, 1/ Commerce estimated that a net subsidy of 2.18 percent ad valorem is being provided to all manufacturers, producers, or exporters in Sweden of stainless steel pipes and tubes, 2/ except for AB Sandvik Steel. The estimated net subsidy on the subject merchandise produced by AB Sandvik Steel was 0.06 percent ad valorem, which Commerce considered to be de minimis. Commerce determined that there are two known manufacturers, producers, and exporters of stainless steel pipes and tubes in Sweden: AB Sandvik Steel and Avesta Sandvik Tube AB. AB Sandvik Steel, wholly owned by Sandvik AB, produces and exports seamless stainless steel pipes and tubes. Avesta Sandvik Tube AB, owned 75 percent by Avesta AB and 25 percent by Sandvik AB, produces and exports welded stainless steel pipes and tubes. The period for which Commerce measured subsidization (review period) was calendar year 1985. No export subsidies were determined to exist. The following programs of the Government of Sweden were found to confer subsidies:

1977-1979 Structural Reorganization Fund--According to the Government of Sweden the purpose of this fund was to facilitate needed structural change within the specialty steel industry. Aid was given in the form of loans (investment, conditional and liquidity) and loan guarantees. Commerce examined an investment loan made to Sandvik AB and loan guarantees to Avesta AB and Nyby Uddeholm, a firm purchased by Avesta in 1984. The benefits from this aid provided an estimated net subsidy of 0.012 percent ad valorem for Sandvik and an estimated net subsidy of 0.009 percent ad valorem for Avesta.

1983-1984 Specialty Steel Restructuring Program--Under this program the assets of three independent, unrelated companies (Avesta AB, Fagersta Sandvik Tube AB, and Nyby Uddeholm AB) were merged into one company, Avesta Sandvik Tube AB. Avesta AB purchased the stainless steel facilities and assets of Fagersta and Uddeholm. Avesta AB controls 75 percent of the ownership of the new company and Sandvik AB controls 25 percent. The negotiated purchase was contingent on, among other factors, the forgiveness of long-term investment and localization loans which had been given originally by the government to Nyby Uddeholm, Fagersta, and Avesta, and which subsequently were assumed by Avesta. The government also forgave repayment of the balance on conditional loans provided to Nyby Uddeholm. Commerce treated the forgiveness of these loan as grants and calculated an estimated net subsidy to Avesta of 2.165 percent ad valorem.

Regional Development Incentives--These programs provide assistance to promote new employment in regions with high unemployment or retarded development. Assistance is provided in the form of localization grants and loans. Both Sandvik AB and Avesta AB were recipients of loans and/or grants. The estimated net subsidy determined by Commerce was 0.05 percent ad valorem for Sandvik and 0.009 percent ad valorem for Avesta.

1/ The entire text of this determination is presented in app. A.

2/ The scope of Commerce's investigation covered certain stainless steel hollow products including pipes, tubes, hollow bars, and blanks therefore, Commerce determined that these products constituted a single class or kind of merchandise.

The U.S. Market

U.S. producers

Producers of stainless steel pipes and tubes can be divided into three general categories: large, integrated producers that make raw steel, produce the basic shapes used as input in pipe and tube production, and then produce the final products; 1/ smaller, nonintegrated producers, which purchase basic shapes such as sheet and strip and billet and further manufacture them into finished products; and redrawers, which purchase redraw hollows and reduce them in diameter and wall thickness, generally through cold working.

Generally, stainless steel pipe and tube producers concentrate on the production of either seamless or welded products. Carpenter Technology was a producer of both types of products. However, on October 20, 1986, the firm announced that it was ceasing production of welded stainless steel pipes and tubes at its plant at Union, NJ. Carpenter continues to produce seamless pipe and tube at plants in Reading, PA, and Bridgeport, CN, as well as at the facilities of a wholly owned subsidiary, Eagle Precision Metals in Fryeburg, ME. * * *. * * *. In addition, six welded pipe and tube producers (designated as redrawers) also produce seamless pipes and tubes from redraw hollows.

During the period of investigation (1983-86), 34 firms 2/ were engaged in the production of the stainless steel pipes and tubes subject to this investigation; production facilities are located throughout the country, with a concentration in the northeastern and midwestern regions.

Five producers of the seamless products 3/ and 20 producers of the welded product provided data in response to the Commission's questionnaire; these producers are believed to account for approximately 100 percent and 85 percent, respectively, of total domestic shipments of seamless and welded products subject to this investigation. In response to a specific inquiry, 14 firms indicated they were in support of the petition, 2 firms were opposed, 7 firms took no position and the remaining 2 firms failed to respond. Firms in

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1/ Al Tech Specialty Steel Corp. is identified in this report as an integrated producer of seamless stainless steel pipes and tubes. On July 1, 1986, Al Tech was acquired by a Canadian firm, Rio Algon. The parent firm will close down Al Tech's melt facility and provide semi-finished bar material from a Canadian operation. Al Tech will continue to produce finished stainless steel pipes and tubes (Transcript I, pp. 179-180).

2/ During the public hearing, respondent Sandvik made reference to a possible producer of seamless pipes and tubes, Curtis Wright. Commission staff contacted officials of the firm, which is located in Buffalo, NY. * * *. The general manager of the firm, ***, indicated that Curtis Wright competed with Sandvik in the * * * and * * *. However, *** stated that * * *.

3/ * * *. * * *. * * *. Sandvik Steel Co. also responded to the questionnaire. However, Sandvik's U.S. production facility in Scranton, PA, is a redraw operation utilizing redraw hollows imported from its parent firm in Sweden, Sandvik AB. Its data have not been included in the data base to avoid double counting. Sandvik opposes the petition of the Specialty Tubing Group. Two other redrawers, *** and ***, provided partial questionnaire responses.

support of the petition accounted for 100 percent (excluding redrawers' shipments) of reported shipments of seamless pipes and tubes and 69 percent of reported shipments of welded pipes and tubes. The names of these producers, the locations of their production facilities, and their shares of 1986 domestic shipments, as compiled from questionnaire responses, are shown in table 1.

Table 1.--Stainless steel pipes and tubes: Selected U.S. producers, their shares of domestic shipments, and plant locations, by types and firms, 1986

Item	Share of reported 1986 domestic shipments	Plant Locations
	Percent	
Seamless:		
Integrated producers:		
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
Total seamless	100.0	
Welded:		
Integrated producers:		
***	***	***
***	***	***
***	***	***
Nonintegrated producers:		
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
Total welded	100.0	

Source: Shares of domestic shipments compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Petitioners have urged the Commission to exclude redrawers from the definition of the domestic industry for two reasons:

> "First, redrawers perform a finishing operation only and do not engage in the essential operation that defines the domestic industry, the manufacture through hot working of stainless pipe and tube from a basic steel shape. Unlike the domestic industry, redrawers including Sandvik Steel Company, purchase tubing that sees no subsequent hot work. Rather, redrawers purchase redraw hollows produced either by the domestic industry or foreign producers and finish the hollows through cold working to the desired specifications. In essence, the work performed by the redrawers is no different from that performed by any other customer that purchases specialty tubing (for example, a hollow bar) and machines or otherwise finishes the product to specification.
>
> Second, it would be inappropriate to include redrawers in the domestic industry because such an industry definition would result in inaccurate and misleading data." 1/

Representatives of Sandvik Steel challenged petitioners' contention on the basis of the substantial value added by seamless redrawers. A telephone survey of redrawers by Commission staff revealed that value added varied from as low as 35 percent to as much as 300 percent. Most firms reported value added in excess of 50 percent. The large variation in value added is a function of the size of the hollow purchased versus the size of the final product produced. The closer the final product is to the dimensions of the redraw hollow, the fewer the passes required on draw machinery and therefore, the less additional cost. Redrawers generally purchase hollows between 1 and 2 inches OD. Firms producing finished tube with OD's of 1 to 1 3/4 inches had lower value added, whereas those producing at 5/8 inch OD and below reported substantially higher values. Sandvik Steel Co., itself a redrawer, has provided data showing that the average percent value added to the redraw hollows it purchased was *** percent in 1985 and *** percent in January-June 1986. 2/

Redraw hollows are supplied to redrawers by Al Tech, Combustion Engineering (until 1984 when it discontinued sales), Sandvik, and producers in Japan, Italy, West Germany, and the United Kingdom. Al Tech sells hollows in sizes ranging from 1.05 to 2.0 inches OD. Sandvik offers imported hollows in sizes ranging from 1.25 to 1.7 inches OD. Nine firms in the United States are known to produce seamless stainless steel pipes and tubes from redraw hollows. 3/ Sales of finished seamless stainless steel pipes and tubes produced by these firms from hollows were equivalent to over 50 percent of U.S. producers' shipments. 4/ These firms are for the most part also producers of welded stainless steel pipes and tubes and can be grouped according to the size range of their redraw production. Six firms 5/ concentrate on the production of smaller diameter tubing ranging from 3/4 inch OD down to hypodermic needle size. The market for these products is dominated by domestic producers, with little or no import penetration. All of the firms producing in this size range were profitable in 1985 and anticipated continued profits in 1986 except

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1/ Postconference brief of Petitioners in investigation No. 701-TA-281 (Preliminary), pp. 9-10.
2/ Ibid.
3/ * * *.
4/ Sales of seamless pipe and tube produced by these firms from redraw hollows are not included in domestic shipment data so as to avoid double counting.
5/ * * *.

for the largest producer, ***, which anticipated losses. The remaining three firms 1/ concentrate their production in larger tube sizes, ranging from 1/8 to 4 1/2 inches OD, with the bulk of production between 1 and 1 3/4 inches OD. These firms appear to have more foreign competition and, except for ***, the size range of their production overlaps to some degree with that of their suppliers of redraw hollows. All three firms were profitable in 1985 and, with the exception of ***, expected profits to continue in 1986.

U.S. importers

Two firms import stainless steel pipes and tubes from Sweden. Seamless stainless pipes and tubes are imported by Sandvik Steel Co., located in Scranton, PA. The company is a division of Sandvik, Inc., a Delaware corporation that in turn is owned by Sandvik AB of Sweden. Sandvik is an importer of both seamless stainless steel hollows and finished seamless stainless pipes and tubes. It also produces finished seamless stainless steel pipes and tubes at its facility in Scranton, utilizing redraw hollows imported from Sweden. Welded stainless steel pipes and tubes are imported by Avesta Stainless, Inc., located in Totowa, NJ. Avesta Stainless is a wholly owned subsidiary of Avesta AB, a Swedish stainless steel producer. With minor exceptions, both Sandvik and Avesta are exclusive U.S. importers of seamless and welded stainless steel pipes and tubes produced by their parent firms in Sweden. 2/

Channels of distribution

In the U.S. market, sales of finished pipes and tubes are generally made directly to end users or to distributors, which in turn sell to end users. Distributors are middlemen that buy large quantities of pipes and tubes, typically from both domestic producers and importers, warehouse the product, and sell smaller quantities to end users. According to questionnaire responses, 50 percent of U.S. producers' domestic shipments of seamless stainless steel pipes and tubes and *** percent of U.S. importers' domestic shipments of such products were made to unrelated distributors in 1986. About 66 percent of U.S. producers' domestic shipments of welded stainless steel pipes and tubes and *** percent of U.S. importers' domestic shipments of such products in 1986 were made to unrelated distributors. The remaining shipments were made to unrelated end users.

The marketplace for stainless steel pipes and tubes in the United States can be characterized by two flows of goods. The first and largest is the sale of finished stainless steel pipes and tubes, either domestically produced or imported. This flow is supplied by a few large, integrated producers of seamless stainless steel pipes and tubes, and a much larger group of nonintegrated welded pipe and tube producers. The second flow takes place primarily in the seamless product group. The integrated seamless producers ship semifinished pipes and tubes or redraw hollows to a group of producers, known as redrawers, which in turn manufacture finished pipes and tubes. These latter goods are generally produced in different dimensions than the output of the integrated mills, but there is some overlap. Imports of redraw hollows from Sweden are controlled by Sandvik Steel Co., which utilizes the bulk of the material in its own redraw facility but also sells some hollows to other domestic redrawers.

1/ * * *.
2/ Transcript, T. pp. 115 and 142.

Apparent U.S. consumption

In the course of investigation No. 701-TA-281 (Preliminary), data from four different data bases were cited in discussing consumption of stainless steel pipes and tubes in the U.S. market. Petitioners provided data from two sources: a survey prepared by the American Iron and Steel Institute and one prepared on their behalf by Economic Consulting Service. 1/ Respondents cited the Commission's own survey of the U.S. steel industry, which included data on specialty steel. 2/ Finally, reference was made to a survey of the U.S. Department of Commerce, which includes data on stainless steel pipe and tube shipments through 1985. 3/ All of these data sources were based on varying numbers of respondents and produced some differences in both absolute volumes and trends in shipments.

During the public hearing in the final investigation, all parties commented further on the data base. Petitioners contended that the Commission's data, as presented in the prehearing report, were the best available measurement of shipments by the domestic industry. 4/ Counsel for petitioners further argued that welded pipe and tube shipment data presented by respondents included products that were outside the scope of the Commission's investigation. 5/ Respondent Avesta alleged that the Commission's welded stainless steel pipe and tube shipment data only represented approximately 60 percent of domestic shipments. 6/ Data submitted on behalf of Avesta indicated that total shipments by U.S. producers of welded stainless steel pipes and tubes were at least 90,000 short tons in 1985 and 88,000 short tons in 1986. The consultant responsible for developing the data base reported that he had included some products that are currently considered outside the scope of this investigation and had based his estimates on telephone conversations with industry contacts rather than questionnaire responses. However, he noted that the Department of Commerce, in its Current Industrial Report, independently arrived at a similar shipment figure for 1985. Finally, witnesses for Sandvik argued that data concerning the operations of redrawers must be included in the Commission's seamless stainless steel pipe and tube data base. 7/

1/ Countervailing Duty Petition against Specialty Tubing from Sweden, Tables 1 and 2.

2/ Annual Survey Concerning Competitive Conditions in the Steel Industry and Industry Efforts to Adjust and Modernize: Report to the President on Investigation No. 332-209 under Section 332 of the Tariff Act of 1930, September 1986, USITC Publication 1881.

3/ Transcript I, p. 97. The survey referred to is an annual Current Industrial Report (MA33B) on steel mill products, published by the Bureau of the Census. The survey was sent to all known producers of steel mill products, approximately 330 companies. Whereas the exact correlation between the pipe and tube products reported in the survey and those subject to this investigation is not known, the survey defines stainless steel as containing 10 percent or more of chromium and including heat resisting steel. This definition conflicts with the Commission's and Commerce's definition of the scope of this investigation, and results in an overstatement of the volume of shipments. Moreover, the Census report includes shipments of seamless pipes and tubes by redrawers. Such data are excluded from the Commission's data base to avoid double counting (shipments of redraw hollows are included in the data base).

4/ Transcript II, p.27.

5/ Ibid.

6/ Ibid., pp. 79 and 93-95.

7/ Ibid., pp. 142-149; also prehearing brief on behalf of Sandvik in investigation No. 701-TA-281 (Final), pp. 19-21.

After reviewing all of the data sources, the staff concluded that, for purposes of this investigation, the responses to the Commission's questionnaire in this investigation provided the most reliable available data base. 1/ The data collection process in this investigation has been hampered by a lack of responsiveness on the part of domestic producers outside the petitioning group. Extensive efforts have been made to obtain responses from nonpetitioners; complete questionnaire responses were received from 14 firms, 6 of which were petitioners. Partial responses (primarily data on capacity, production, shipments, and inventories) were received from 12 firms, and statements as to profitability and competition from imports from Sweden were received from 6 firms.

Domestic shipment data for seamless pipes and tubes reported in response to the Commission's questionnaires are believed to account for all such shipments of the products subject to this investigation. Shipment data from producers designated as redrawers were not used because these firms purchase redraw hollows from both domestic and foreign sources. These hollows are then reduced in size, finished, and sold as pipe and tube. The inclusion of redrawers' shipment data based on tonnage would clearly overstate apparent consumption through double counting in that their purchases of redraw hollows from U.S. producers and foreign sources are included in the consumption data. However, it should be noted that apparent consumption based on value will be understated without redrawers' data because of the value added by redrawers to the hollows purchased from domestic and foreign sources. Data for welded pipes and tubes are estimated to account for 85 percent of the domestic shipments of the welded stainless steel pipes and tubes subject to investigation. In total, usable responses were received from 25 domestic producers (including two of the nine firms identified as redrawers) and were confined to the products subject to this investigation. The consumption data compiled from these responses produces the same trends in shipments and market penetration as the data provided by the petitioners and respondents.

Stainless steel pipes and tubes.--Apparent consumption increased steadily from 81,864 short tons in 1983 to 99,707 short tons in 1985 (table 2). 2/ Consumption declined over 4 percent in 1986 as domestic shipments declined and imports rose less than one half of one percent.

Table 2.--Stainless steel pipes and tubes: Apparent U.S. consumption, by types, 1983-86

(In short tons)

Type	1983	1984	1985	1986
Seamless	21,057	26,938	29,195	26,368
Welded	60,807	68,513	70,512	68,920
Total	81,864	95,451	99,707	95,288

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.

1/ Data on alloy steel pipes and tubes containing less than 11.5 percent chromium (e.g. grade 409) are not included in this data base.
2/ Data on the value of apparent consumption are presented in app. C, table C-1.

Seamless stainless steel pipes and tubes.--Apparent consumption increased sharply, from 21,057 short tons in 1983 to 26,938 short tons in 1984, then continued to increase to 29,195 short tons in 1985. In 1986, consumption decreased almost 10 percent to 26,368 short tons as both domestic shipments and imports declined.

Welded stainless steel pipes and tubes.--Apparent consumption in this category followed the same general trend, increasing from 60,807 short tons in 1983 to 70,512 short tons in 1985, then declining 2.3 percent to 68,920 short tons in 1986. Although domestic shipments declined about 7 percent, imports in 1986 increased almost 20 percent.

Consideration of Alleged Material Injury to an Industry in the United States

Complete data relating to the condition of the industry producing seamless stainless steel pipes and tubes were received from five integrated firms and one redrawer. One of the remaining eight redrawers was able to provide capacity, production, and shipment data; and one of the remaining seven firms provided a statement as to its profitibility and competition with imports from Sweden. 1/ The data base used in the following discussion consists of the returns of the five integrated producers of seamless pipes and tubes. Domestic shipments by these firms accounted for 57 percent of the net shipments of seamless stainless steel pipes and tubes reported in the Current Industrial Report for 1985. Data concerning the U.S. production operation of Sandvik Steel Co., a wholly owned subsidiary of Sandvik AB (Sweden), were excluded from the domestic seamless data base as were data for the other seamless redrawer. 2/ Tabulations including Sandvik's data are provided where appropriate.

Complete data relating to the condition of the industry producing welded stainless steel pipes and tubes were received from three integrated producers and five nonintegrated firms. Data concerning capacity, production, shipments and inventories were received from 12 additional nonintegrated producers. Statements relating to profitability and competition with imports from Sweden were received from six firms that had provided no data or partial data. The 20 firms that provided shipment data accounted for 69 percent of the net shipments of welded stainless steel pipes and tubes reported in the Current Industrial Report for 1985 and 68 percent of total 1985 shipments estimated by Avesta.

1/ Without complete shipment data from all redrawers, as well as data by source for their purchases of redraw hollows, domestic shipments could not be recalculated to show only shipments of finished pipes and tubes as suggested by respondent Sandvik.

2/ In the preliminary investigation, the Commission excluded Sandvik's data under the related party provision. Although a related party's shipment data would normally be included so as not to skew consumption data, Sandvik's use of imported Swedish redraw hollows in its production operation requires the exclusion of such data to prevent double counting. Data for the other redrawer were also excluded to avoid double counting. If data for the domestic shipments of finished seamless pipes and tubes by these two firms were added to the Commission's data base, the questionnaire coverage for 1985 would increase to *** percent of the Current Industrial Report figure.

U.S. production, capacity, and capacity utilization

Stainless steel pipes and tubes.--As shown in table 3, production of stainless steel pipes and tubes increased from 65,342 short tons in 1983 to 68,828 short tons in 1985. Production then declined to 67,084 short tons in 1986. Capacity to produce stainless steel pipes and tubes 1/ declined irregularly from 1983 to 1986. Capacity utilization fluctuated between 51 and 54 percent during 1983-86.

Table 3.--Stainless steel pipes and tubes: U.S. production, capacity, and capacity utilization, by types, 1983-86

Item	1983	1984	1985	1986
Production:				
Seamless.....short tons..	9,963	7,760	7,374	6,804
Welded.....do....	55,379	57,907	61,454	60,280
Total.....do....	65,342	65,667	68,828	67,084
Capacity: 1/				
Seamless.....do....	21,300	21,300	21,300	3/18,300
Welded.....do....	106,265	2/101,676	105,203	108,011
Total.....do....	127,565	122,976	126,503	126,311
Capacity utilization:				
Seamless..... percent..	46.8	36.4	34.6	37.2
Welded.....do....	52.1	56.9	58.4	55.8
Average.....do....	51.2	53.4	54.4	53.1

1/ Average capacity to produce rather than end of year capacity.
2/ The sharp decline in welded capacity in 1984 largely reflects * * *.
* * *.
3/ * * *. * * *.

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

Seamless stainless steel pipes and tubes.--Seamless production decreased from 9,963 short tons in 1983 to 7,374 short tons in 1985, or by 26 percent. Production continued to decline in 1986 to 6,804 short tons. Capacity remained stable at 21,300 short tons during 1983-85. In 1986, capacity decreased sharply as Babcock and Wilcox withdrew from production. The capacity utilization rate decreased from 46.8 percent in 1983 to 34.6 percent in 1985, then increased slightly in 1986 as capacity declined.

Welded stainless steel pipes and tubes.--Production of welded pipes and tubes increased from 55,379 short tons in 1983 to 61,454 short tons in 1985, then declined slightly to 60,280 short tons in 1986. Capacity declined by 4 percent from 1983 to 1984 and then rose by 6 percent from 1984 to 1986. Capacity utilization peaked at 58.4 percent in 1985, then declined to 55.8 percent in 1986 as capacity increased slightly and production declined.

1/ Capacity data submitted by questionnaire respondents were based on a wide combination of hours worked and weeks of operation. Responses for the largest producers ranged from 120 to 168 hours per week and 50 to 52 weeks per year.

U.S. producers' domestic shipments

Stainless steel pipes and tubes.--Domestic shipments of stainless steel pipes and tubes by U.S. producers increased from 62,744 short tons in 1983 to 64,812 short tons in 1985 (table 4). 1/ Shipments in 1986 decreased 7 percent to 60,233 short tons.

Table 4.--Stainless steel pipes and tubes: U.S. producers' domestic shipments, by types, 1983-86

(In short tons)

Type	1983	1984	1985	1986
Seamless	7,876	6,943	6,487	5,855
Welded	54,868	56,227	58,325	54,378
Total	62,744	63,170	64,812	60,233

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

Seamless stainless steel pipes and tubes.--Shipments declined almost 26 percent from 1983 to 1986, dropping from 7,876 short tons in 1983 to 5,855 short tons in 1986.

As previously noted, sales in the seamless stainless steel pipe and tube market consist of two flows--redraw hollows and finished pipes and tubes. Data on U.S. producers' domestic shipments of redraw hollows and other seamless stainless steel pipes and tubes 2/ are presented in the following tabulation, compiled from data submitted in response to questionnaires of the U.S. International Trade Commission (in short tons):

Item	1983	1984	1985	1986
Redraw hollows	***	***	***	***
Other seamless	***	***	***	***
Total	7,876	6,943	6,487	5,855

Domestic shipments of both redraw hollows and finished seamless pipes and tubes for Sandvik Steel Co. were not included in the shipment data base as previously discussed. Such data are provided in the following tabulation (in short tons):

Item	1983	1984	1985	1986
Redraw hollows	***	***	***	***
Other seamless	***	***	***	***
Total	***	***	***	***

1/ Data on the value of the domestic shipments are presented in app. C, table C-2.

2/ The other seamless stainless steel pipes and tubes do not include the redrawers' shipments of finished stainless steel products.

Welded stainless steel pipes and tubes.-- Producers' domestic shipments followed a different trend from seamless products, increasing from 1983 to 1985. Shipments then decreased about 7 percent in 1986 to 54,378 short tons.

U.S. exports

Exports of stainless steel pipes and tubes 1/ declined from 1,363 short tons in 1983 to 1,307 short tons in 1984 (table 5). Exports increased to 1,319 short tons in 1985 and to 1,553 short tons in 1986. The bulk of exports in 1986 were welded pipes and tubes destined for the European Community and Canada.

Table 5.--Stainless steel pipes and tubes: U.S. producers' export shipments, by types, 1983-86

(In short tons)

Type	1983	1984	1985	1986
Seamless	227	509	167	133
Welded	1,136	798	1,152	1,420
Total	1,363	1,307	1,319	1,553

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

U.S. producers' inventories

Stainless steel pipes and tubes.--U.S. producers' yearend inventories decreased slightly during 1983-86. During the period covered by the investigation, these inventories varied between 23 and 26 percent of annual domestic shipments, as shown in the following tabulation:

	Inventories (short tons)	Ratio of inventories to shipments (percent)
As of Dec. 31--		
1983	15,858	25.3
1984	15,359	24.3
1985	15,038	23.2
1986	15,679	26.0

1/ Exports were compiled from questionnaire responses. Official statistics of the U.S. Department of Commerce appear to be vastly overstated, a fact acknowledged by Commerce in correspondence with counsel representing petitioners.

Seamless stainless steel pipes and tubes.--U.S. producers' yearend inventories of seamless pipes and tubes decreased by 55 percent during 1983-86. During the period covered by the investigation, these inventories decreased from 58 to 35 percent of annual domestic shipments, as shown in the following tabulation:

	Inventories (short tons)	Ratio of inventories to shipments (percent)
As of Dec. 31--		
1983	4,586	58.2
1984	3,827	55.1
1985	3,049	47.0
1986	2,074	35.4

Welded stainless steel pipes and tubes.--U.S. producers' yearend inventories of welded pipes and tubes increased slightly during 1983-85, but climbed sharply in 1986 as shipments declined. From 1983 to 1985, these inventories remained stable at slightly more than 20 percent of annual domestic shipments. The ratio of inventories to shipments rose to 25 percent in 1986 as shown in the following tabulation:

	Inventories (short tons)	Ratio of inventories to shipments (percent)
As of Dec. 31--		
1983	11,272	20.5
1984	11,532	20.5
1985	11,989	20.6
1986	13,605	25.0

U.S. employment

The number of workers employed in the production of stainless steel pipes and tubes decreased throughout the period of investigation (table 6). Hours worked by, wages paid to, and total compensation of such workers also declined. The trends related to the seamless and welded products were similar with the exception of wages per hour. On an hourly basis, wages of production and related employees producing seamless stainless steel pipes and tubes were fairly constant during 1983-85 and then fell in 1986. Hourly wages of welded pipe and tube workers declined irregularly from 1983 to 1985, then increased slightly in 1986. Productivity, based on tons of production per manhour worked, remained stable from 1983 to 1985, then increased in 1986.

Eleven firms reported the union status of their employees. Workers at nine firms are represented by the United Steel Workers, and workers at another are represented by the International Brotherhood of Electrical, Radio, and Machine Workers. Employees of the remaining firm, Allegheny Ludlum Steel Corp., are not represented by a union. Whereas most of the responding producers reported minor layoffs of employees, two firms, Carpenter and Damascus Tubular Products, reported reductions in staff that they characterized as permanent. Carpenter reported a permanent layoff of *** workers on December 31, 1985 and the additional layoff of *** workers as of December 31, 1986. Damascus (a welded pipe and tube producer) reported a *** percent reduction in the number of its employees between September 1983 and June 1986.

Table 6.--Stainless steel pipes and tubes: Employment of production and related workers and their hours worked, wages paid, total compensation, and productivity, 1983-86

Item	1983	1984	1985	1986
Production & related workers:				
Seamless.....Number..	430	407	340	234
Welded.....do....	1,030	965	964	875
Total.....do....	1,460	1,372	1,304	1,109
Hours worked:				
Seamless.....1,000 hours..	863	843	724	509
Welded.....do....	2,141	2,060	2,123	1,942
Total.....do....	3,004	2,903	2,847	2,451
Wages paid:				
Seamless.....1,000 dollars..	11,955	11,647	9,998	6,339
Welded.....do....	24,405	24,173	22,745	21,151
Total.....do....	36,360	35,820	32,743	27,490
Total compensation:				
Seamless.....do....	19,064	17,856	15,326	9,353
Welded.....do....	29,625	28,868	26,669	25,160
Total.....do....	48,689	46,724	41,995	34,513
Wages per hour:				
Seamless.....dollars..	13.86	13.82	13.81	12.45
Welded.....do....	11.40	11.73	10.71	10.89
Average.....do....	12.10	12.34	11.50	11.22
Productivity: 1/				
Seamless.....tons per hour..	.011	.009	.010	.013
Welded.....do....	.019	.019	.019	.021
Average.....do....	.017	.017	.017	.019

1/ Only includes data from firms reporting both production and hours worked.

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

Financial experience of U.S. producers

Four producers provided usable income-and-loss data on the overall operations of their establishment within which seamless stainless steel pipes and tubes are produced, as well as on their operations producing only seamless stainless steel pipes and tubes. Eight producers provided usable financial data on the overall operations of their establishments within which welded stainless steel pipes and tubes are produced, as well as on their operations producing only welded stainless steel pipes and tubes. 1/

Seamless stainless steel pipe and tube establishment operations.--Aggregate income-and-loss data on seamless overall establishment operations are presented in table 7. Aggregate net sales of the four firms 2/ rose from $*** million in 1983 to $*** million in 1984, an increase of *** percent. The increase in sales was due to increased sales in product lines other than stainless steel pipe and tube (which accounted for less than 5 percent of aggregate establishment sales in 1984 and 1985). During 1985, however, sales declined to $*** million, or by *** percent from the 1984 level.

Operating income worsened from $*** million in 1983 to a loss of $*** million in 1984, and deteriorated further to a $*** million operating loss during the 1985 accounting year. The operating income (loss) margins for the producers during the 1983-85 period were an erratic *** percent, *** percent, and *** percent, respectively. *** of the four producers experienced operating losses during 1983, 1984, and 1985.

During the interim period ended September 30, 1986, aggregate net sales totaled $*** million, down *** percent from net sales of $*** million reported during interim 1985. Aggregate operating losses of the four producers lessened substantially from $*** million during interim 1985 to $*** million during interim 1986. The operating loss margins for the 1985 and 1986 interim periods were *** percent and *** percent, respectively. *** firms reported operating losses during interim 1985 and *** firms incurred an operating loss during interim 1986.

1/ In addition to these firms, six firms provided statements as to the ability of their welded stainless steel pipe and tube operations to generate net operating profits. * * *. Specific levels of profit or loss were not provided. *** and *** reported being injured by Swedish competition. * * * did not experience injurious competition with Swedish material.

2/ The firms are * * *. These firms, * * *, accounted for approximately *** percent of domestic shipments in 1986 reported in response to the Commission's questionnaire.

Table 7.--Income-and-loss experience of 4 U.S. producers 1/ on the overall operations of their establishments within which seamless stainless steel pipe and tube is produced, accounting years 1983-85, and interim periods ended Sept. 30, 1985, and Sept. 30, 1986

Item	1983	1984	1985	Interim period ended Sept. 30 2/-- 1985	1986
Net sales....1,000 dollars..	***	***	***	***	***
Cost of goods sold....do....	***	***	***	***	***
Gross profit.....do....	***	***	***	***	***
General, selling, and administrative expenses 1,000 dollars..	***	***	***	***	***
Operating income or (loss) 1,000 dollars..	***	***	***	***	***
Interest expense .....do....	***	***	***	***	***
Other income or (expense), net.....1,000 dollars..	***	***	***	***	***
Net income or (loss) before income taxes 1,000 dollars..	***	***	***	***	***
Depreciation and amortization expense included above.....1,000 dollars..	***	***	***	***	***
Cashflow.....do....	***	***	***	***	***
As a share of net sales:					
Cost of goods sold percent..	***	***	***	***	***
Gross profit.....do....	***	***	***	***	***
General, selling, and administrative expenses percent..	***	***	***	***	***
Operating income or (loss) percent..	***	***	***	***	***
Net income or (loss) before income taxes percent..	***	***	***	***	***
Number of firms reporting operating losses.....	***	***	***	***	***
Number of firms reporting...	***	***	***	***	***

1/ Does not include ***.
2/ 3 firms reported 9 months interim data (Jan. 1 - Sept. 30); and 1 firm reported 3 months interim data (July 1 - Sept. 30).

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

Seamless stainless steel pipe and tube product line operations.--Income-and-loss data on seamless operations are presented in table 8. Net sales of the four integrated firms 1/ declined from $*** million during 1983 to $*** million during 1984, or by *** percent, then dropped further by *** percent in 1985 to $*** million.

Operating losses increased sharply from $*** million in 1983 to $*** million in 1984. Operating income of $*** million was reported during 1985, in large part because of * * *. Of the two producers that experienced consistent operating losses during the 1983-85 period, ***'s losses during 1983 and 1984 were by far the heaviest. * * *. The aggregate operating income (loss) margins for the four producers of seamless steel pipe and tube during the 1983-85 period were *** percent, *** percent, and *** percent, respectively. *** producers experienced operating losses during all 3 years.

Seamless net sales for the three integrated producers that provided interim data 2/ increased from $*** million during the interim period ended September 30, 1985, to $*** million during the interim period ended September 30, 1986, or by *** percent. Operating income nearly doubled from $*** million in interim 1985 to $*** million during interim 1986, an increase of *** percent. The operating margins during interim 1985 and 1986 were *** percent and *** percent, respectively. * * *.

In order to show the effect of ***'s exclusion from the seamless product line operations, the tabulation below presents a comparison of the three integrated producers' sales and operating data with those of ***:

Item	1983	1984	1985	Interim period ended Sept. 30-- 1985	1986
Net sales:					
***.....	***	***	***	***	***
3 integrated seamless firms	***	***	***	***	***
Total.....	***	***	***	***	***
Operating income or (loss):					
***.....	***	***	***	***	***
3 integrated seamless firms	***	***	***	***	***
Total.....	***	***	***	***	***
Operating income (loss) as a percent of sales:					
***.....	***	***	***	***	***
3 integrated seamless firms	***	***	***	***	***
Weighted average.....	***	***	***	***	***

1/ The firms are * * *. * * *.
2/ The firms are * * *.

Table 8.--Income-and-loss experience of 4 U.S. producers 1/ on their operations producing seamless stainless steel pipe and tube, accounting years 1983-85, and interim periods ended Sept. 30, 1985, and Sept. 30, 1986

Item	1983	1984	1985 3/	Interim period ended Sept 30 2/-- 1985	1986
Net sales....1,000 dollars..	***	***	***	***	***
Cost of goods sold....do....	***	***	***	***	***
Gross profit.....do....	***	***	***	***	***
General, selling, and administrative expenses 1,000 dollars..	***	***	***	***	***
Operating income or (loss) 1,000 dollars..	***	***	***	***	***
Interest expense .....do....	***	***	***	***	***
Other income or (expense), net.....1,000 dollars..	***	***	***	***	***
Net income or (loss) before income taxes 1,000 dollars..	***	***	***	***	***
Depreciation and amortization expense included above.....1,000 dollars..	***	***	***	***	***
Cashflow.....do....	***	***	***	***	***
As a share of net sales:					
Cost of goods sold percent..	***	***	***	***	***
Gross profit.....do....	***	***	***	***	***
General, selling, and administrative expenses percent..	***	***	***	***	***
Operating income or (loss) percent..	***	***	***	***	***
Net income or (loss) before income taxes percent..	***	***	***	***	***
Number of firms reporting operating losses.....	***	***	***	***	***
Number of firms reporting...	***	***	***	***	***

1/ ***.
2/ Two firms reported 9 months interim data (Jan. 1 - Sept. 30) and 1 firm reported 3 months interim data (July 1 - Sept. 30).
3/ * * *. * * *. (All other seamless producers reported full year data based on a calendar year ending Dec. 31.)

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

Sandvik Steel Co., a wholly owned subsidiary of Sandvik AB, is the exclusive importer of Swedish seamless stainless steel pipe and tube. Because of the nature of this relationship, data contained in the seamless product line table exclude Sandvik. In order to show the effect of Sandvik's exclusion from the data, the following tabulation presents a comparison of seamless stainless steel pipe and tube sales and operating income data for Sandvik and the other four seamless producers:

Item	1983	1984	1985	Interim period ended Sept. 30-- 1985	1986
Net sales:					
Seamless producers 1/.....	***	***	***	***	***
Sandvik Steel Co.....	***	***	***	***	***
Total.....	***	***	***	***	***
Operating income or loss:					
Seamless producers 1/.....	***	***	***	***	***
Sandvik Steel Co.....	***	***	***	***	***
Total.....	***	***	***	***	***
Operating income (loss)as a percent of sales:					
Seamless producers 1/.....	***	***	***	***	***
Sandvik Steel Co.....	***	***	***	***	***
Weighted average.....	***	***	***	***	***

1/ 4 seamless producers provided 1983-85 data; 2 firms provided usable interim data covering the 9-month period from Jan. 1 to Sept. 30 and one firm provided 3-month interim data (July 1 to Sept. 30).

Welded stainless steel pipe and tube establishment operations.--Aggregate income-and-loss data on welded overall establishment operations are presented in table 9. Aggregate net sales of the eight firms 1/ rose from $181.3 million in 1983 to $188.2 million during 1984, an increase of 3.9 percent, but then declined by 2.9 percent to $182.7 million during 1985.

Operating losses declined sharply from $11.1 million in 1983 to $1.8 million during 1984, but then increased to $3.5 million in 1985. The operating loss margins during the 1983-85 period were: 6.1 percent, 1.0 percent, and 1.9 percent, respectively. Six welded producers experienced operating losses in 1983, four during 1984, and three during 1985.

During the interim period ended September 30, 1986, aggregate establishment net sales of the eight welded producers totaled $130.2 million, up 0.2 percent from net sales of $130.0 million reported during interim 1985. Operating income for the 1986 interim period was $2.4 million, an improvement over the loss of $895,000 that was experienced during interim 1985. The operating income (loss) margins during interim 1985 and 1986 were (0.7) percent and 1.8 percent, respectively. Four welded producers reported operating losses during interim 1985, and three producers experienced losses during interim 1986.

1/ The firms are * * *. These firms accounted for 70 percent of domestic shipments in 1986 reported in response to the Commission's questionnaire and 53 percent of the net shipments reported in the 1985 Current Industrial Report.

Table 9.--Income-and-loss experience of 8 U.S. producers on the overall operations of their establishments within which welded stainless steel pipe and tube is produced, accounting years 1983-85, and interim periods ended Sept. 30, 1985, and Sept. 30, 1986

Item	1983	1984	1985	Interim period ended Sept. 30 1/-- 1985	1986
Net sales....1,000 dollars..	181,250	188,246	182,730	129,984	130,201
Cost of goods sold....do....	174,486	172,362	167,418	117,503	114,584
Gross profit.....do....	6,764	15,884	15,312	12,481	15,617
General, selling, and administrative expenses 1,000 dollars..	17,822	17,708	18,771	13,376	13,225
Operating income or (loss) 1,000 dollars..	(11,058)	(1,824)	(3,459)	(895)	2,392
Interest expense .....do....	1,480	1,412	2,033	1,451	1,378
Other income or (expense), net.....1,000 dollars..	526	(4,057)	338	201	(2,915)
Net income or (loss) before income taxes 1,000 dollars..	(12,012)	(7,293)	(5,154)	(2,145)	(1,901)
Depreciation and amortization expense included above.....1,000 dollars..	5,095	5,234	5,046	3,612	3,825
Cashflow.....do....	(6,917)	(2,059)	(108)	1,467	1,924
As a share of net sales:					
Cost of goods sold percent..	96.3	91.6	91.6	90.4	88.0
Gross profit.....do....	3.7	8.4	8.4	9.6	12.0
General, selling, and administrative expenses percent..	9.8	9.4	10.3	10.3	10.2
Operating income or (loss) percent..	(6.1)	(1.0)	(1.9)	(0.7)	1.8
Net income or (loss) before income taxes percent..	(6.6)	(3.9)	(2.8)	(1.7)	(1.5)
Number of firms reporting operating losses.....	6	4	3	4	3
Number of firms reporting...	8	8	8	8	8

1/ 6 firms reported 9 months interim data (Jan. 1 - Sept. 30), 1 firm reported 3 months interim data (July 1 - Sept. 30), and 1 firm reported 12 months interim data (Sept. 1 - Aug. 31).

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

Welded stainless steel pipe and tube product line operations.--Income-and-loss data on welded operations are presented in table 10. Net sales of the eight 1/ firms declined from $153.2 million in 1983 to $150.8 million during 1984, or by 1.6 percent, then rose slightly by less than 1 percent in 1985 to $151.2 million.

Operating losses were reduced sharply from $11.7 million in 1983 to $2.9 million during 1984 and then improved further to $2.0 million for 1985. The operating loss margins during the 1983-85 period were as follows: 7.7 percent, 1.9 percent, and 1.3 percent, respectively. Six welded producers experienced losses during 1983, four during 1984, and two during 1985.

During interim periods 1985 and 1986, welded net sales rose from $108.3 million to $108.7 million, an increase of less than 1 percent. Operating income for the 1986 interim period was $1.6 million, an improvement over the loss of $145,000 that was experienced during interim 1985. The operating income (loss) margins during the 1985 and 1986 interim periods were (0.1) percent and 1.5 percent, respectively. Three welded producers reported operating losses during interim 1985 and four during interim 1986.

Of the eight welded producers that provided the Commission with financial data on their welded operations, three are integrated producers 2/ and five are nonintegrated producers. 3/ Operating results for the two types of welded producers are quite diverse, as can be seen in the tabulation below, which presents a comparison of sales and operating income for the integrated and nonintegrated producers:

Item	1983	1984	1985	Interim period ended Sept. 30-- 1985	1986
Net sales:					
Integrated welded producers 1/	57,182	51,052	47,031	28,517	26,601
Nonintegrated welded producers 2/	96,043	99,754	104,184	79,784	82,097
Total	153,225	150,806	151,215	108,301	108,698
Operating income:					
Integrated welded producers 1/	(11,177)	(6,055)	(5,908)	(3,409)	(2,621)
Nonintegrated welded producers 2/	(567)	3,130	3,902	3,264	4,231
Total	(11,744)	(2,925)	(2,006)	(145)	1,610
Operating income as a percent of sales:					
Integrated welded producers 1/	(19.5)	(11.9)	(12.6)	(12.0)	(9.9)
Nonintegrated welded producers 2/	(0.6)	3.1	3.7	4.1	5.2
Weighted average	(7.7)	(1.9)	(1.3)	(0.1)	1.5

1/ 3 integrated welded producers provided 1983-85 data as well as interim data.
2/ 5 nonintegrated welded producers provided 1983-85 data as well as interim data.

1/ The firms are * * *. * * *.
2/ The firms are * * *.
3/ The firms are * * *.

Table 10.--Income-and-loss experience of 8 U.S. producers on their operations producing welded stainless steel pipe and tube, accounting years 1983-85, and interim periods ended Sept. 30, 1985, and Sept. 30, 1986

Item	1983	1984	1985	Interim period ended Sept. 30 1/-- 1985	1986
Net sales....1,000 dollars..	153,225	150,806	151,215	108,301	108,698
Cost of goods sold....do....	148,506	137,455	138,153	97,542	96,009
Gross profit.....do....	4,719	13,351	13,062	10,759	12,689
General, selling, and administrative expenses 1,000 dollars..	16,463	16,276	15,068	10,904	11,079
Operating income or (loss) 1,000 dollars..	(11,744)	(2,925)	(2,006)	(145)	1,610
Interest expense .....do....	550	482	1,103	831	851
Other income or (expense), net.....1,000 dollars..	388	(2,293)	338	201	(1,845)
Net income or (loss) before income taxes 1,000 dollars..	(11,906)	(5,700)	(2,771)	(775)	(1,086)
Depreciation and amortization expense included above.....1,000 dollars..	4,753	4,832	4,777	3,420	3,615
Cashflow.....do....	(7,153)	(868)	2,006	2,645	2,529
As a share of net sales:					
Cost of goods sold percent..	96.9	91.1	91.4	90.1	88.3
Gross profit.....do....	3.1	8.9	8.6	9.9	11.7
General, selling, and administrative expenses percent..	10.7	10.8	10.0	10.1	10.2
Operating income or (loss) percent..	(7.7)	(1.9)	(1.3)	(0.1)	1.5
Net income or (loss) before income taxes percent..	(7.8)	(3.8)	(1.8)	(0.7)	(1.0)
Number of firms reporting operating losses.....	6	4	2	3	4
Number of firms reporting...	8	8	8	8	8

1/ 6 firms reported 9 months interim data (Jan. 1 - Sept. 30), 1 firm reported 3 months interim data (July 1 - Sept. 30), and 1 firm reported 12 months interim data (Sept. 1 - Aug. 31).

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

Combined seamless and welded stainless steel pipe and tube product line operations.--Income-and-loss data on combined seamless and welded operations are presented in table 11. Net sales declined from $*** million in 1983 to $*** million in 1984, or by *** percent, then fell further to $*** million during 1985, a decline of *** percent.

Operating losses improved from $*** million reported in 1983 to $*** million for 1984. Operating income of $*** million was achieved during the 1985 period. The operating income (loss) margins were *** percent in 1983, *** percent in 1984, and *** percent during 1985. *** producers reported operating losses during 1983, *** producers reported losses during 1984, and *** firms incurred losses in 1985.

During the interim period ended September 30, 1986, combined seamless and welded net sales totaled $*** million, up *** percent from combined net sales of $*** million during interim 1985. Operating income improved from $*** million during interim 1985 to $*** million during interim 1986. The operating margins were *** percent and *** percent for interim 1985 and 1986, respectively. *** producers reported operating losses in interim 1985, and *** producers reported operating losses during interim 1986.

Value of plant, property, and equipment for seamless operations.--The data provided by three seamless firms on their end-of-period investment in productive facilities in which seamless stainless steel pipe and tube is produced are shown in table 12. The aggregate investment in productive facilities for seamless pipe and tube, valued at cost, increased from $*** million in 1983 to $*** million in 1984, then rose slightly to $*** million during 1985. The book value of such assets declined from $*** million in 1983 to $*** million in 1984, then fell again to $*** million during 1985.

The asset valuation for seamless pipe and tube, at original cost, declined slightly from $*** million as of September 30, 1985, to $*** million as of September 30, 1986. Similarly, the book value of such assets declined somewhat from $*** million as of September 30, 1985, to $*** million as of September 30, 1986.

Capital expenditures for seamless operations.--The data provided by the three firms relative to their capital expenditures for land, buildings, and machinery and equipment used in the manufacture of seamless stainless steel pipe and tube are shown in table 13. Capital expenditures relating to seamless pipe and tube increased slightly from $*** in 1983 to $*** in 1984, then declined to $*** during 1985. Such expenditures declined from $*** during the interim period ended September 30, 1985, to $*** during the interim period ended September 30, 1986.

Value of plant, property, and equipment for welded operations.--The data provided by seven firms on their end-of-period investment in productive facilities in which welded stainless steel pipes and tubes are produced are shown in table 14. The aggregate investment in productive facilities for welded pipe and tube, valued at cost, decreased from $106.6 million in 1983 to $104.3 million in 1984, then rose to $111.1 million in 1985. The book value of such assets decreased from $44.3 million in 1983 to $42.9 million in 1984, then rose to $44.4 million during 1985.

Table 11.--Income-and-loss experience of 13 U.S. producers on their operations producing seamless 1/ and welded stainless steel pipe and tube, accounting years 1983-85, and interim periods ended Sept. 30, 1985 and Sept. 30, 1986

Item	1983	1984	1985 3/	Interim period ended Sept 30 2/-- 1985	1986
Net sales....1,000 dollars..	***	***	***	***	***
Cost of goods sold....do....	***	***	***	***	***
Gross profit.....do....	***	***	***	***	***
General, selling, and administrative expenses 1,000 dollars..	***	***	***	***	***
Operating income or (loss) 1,000 dollars..	***	***	***	***	***
Interest expense .....do....	***	***	***	***	***
Other income or (expense) net.....1,000 dollars..	***	***	***	***	***
Net income or (loss) before income taxes 1,000 dollars..	***	***	***	***	***
Depreciation and amortization expense included above.....1,000 dollars..	***	***	***	***	***
Cashflow.....do....	***	***	***	***	***
As a share of net sales:					
Cost of goods sold percent..	***	***	***	***	***
Gross profit.....do....	***	***	***	***	***
General, selling, and administrative expenses percent..	***	***	***	***	***
Operating income or (loss) percent..	***	***	***	***	***
Net income or (loss) before income taxes percent..	***	***	***	***	***
Number of firms reporting operating losses.....	***	***	***	***	***
Number of firms reporting...	***	***	***	***	***

1/ Includes ***.
2/ 9 firms reported 9 months interim data (Jan. 1 - Sept. 30), 2 firms reported 3 months interim data (July 1 - Sept. 30), and 1 firm reported 12 months interim data (Sept. 1 - Aug. 31).
3/ * * *.

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

Table 12.--Seamless stainless steel pipe and tube: Value of property, plant and equipment of U.S. producers, 1/ accounting years 1983-85 and interim periods ended Sept. 30, 1985, and Sept. 30, 1986

Item	1983	1984	1985	Interim period ended Sept. 30 2/ 1985	1986
All products of establishment:					
Original cost..1,000 dollars..	***	***	***	***	***
Book value.....do....	***	***	***	***	***
Number of firms reporting.....	3	3	3	3	3
Seamless stainless steel pipes and tubes:					
Original cost..1,000 dollars..	***	***	***	***	***
Book value.....do....	***	***	***	***	***
Number of firms reporting.....	3	3	3	3	3

1/ The firms are * * *, * * *.
2/ 2 firms reported 9 months interim data (Jan. 1 - Sept. 30) and 1 firm reported 3 months interim data (July 1 - Sept. 30).

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

Table 13.--Seamless stainless steel pipe and tube: Capital expenditures by U.S. producers, 1/ accounting years 1983-85 and interim periods ended Sept. 30, 1985, and Sept. 30, 1986

Item	1983	1984	1985	Interim period ended Sept. 30 2/ 1985	1986
All products of the establishments:					
Land and land improvements 1,000 dollars..	***	***	***	***	***
Building or leasehold improvements.....do....	***	***	***	***	***
Machinery, equipment, and fixtures.....do....	***	***	***	***	***
Total.....do....	***	***	***	***	***
Number of firms reporting..	3	3	3	3	3
Seamless stainless steel pipes and tubes:					
Land and land improvements 1,000 dollars..	***	***	***	***	***
Building or leasehold improvements.....do....	***	***	***	***	***
Machinery, equipment, and fixtures.....do....	***	***	***	***	***
Total.....do....	***	***	***	***	***
Number of firms reporting..	3	3	3	3	3

1/ The firms are * * *.
2/ 2 firms reported 9 months interim data (Jan. 1 - Sept. 30) and 1 firm reported 3 months interim data (July 1 - Sept. 30).

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

Table 14.--Welded stainless steel pipe and tube: Value of property, plant and equipment of U.S. producers, 1/ accounting years 1983-85 and interim periods ended Sept. 30, 1985, and Sept. 30, 1986

Item	1983	1984	1985	Interim period ended Sept. 30 2/ 1985	1986
All products of establishment:					
Original cost..1,000 dollars..	110,364	106,525	112,430	112,626	114,410
Book value.....do....	46,462	43,904	44,975	45,360	43,362
Number of firms reporting.....	7	7	7	7	7
Welded stainless steel pipes and tubes:					
Original cost..1,000 dollars..	106,568	104,263	111,141	110,693	113,117
Book value.....do....	44,345	42,877	44,378	44,393	42,767
Number of firms reporting.....	7	7	7	7	7

1/ The firms are * * *.
2/ 5 firms reported 9 months interim data (Jan. 1 - Sept. 30), 1 firm reported 3 months interim data (July 1 - Sept. 30), and 1 firm reported 12 months interim data (Sept. 1 - Aug. 31).

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

The asset valuation for welded pipe and tube, at original cost, rose from $110.7 million as of September 30, 1985, to $113.1 million as of September 30, 1986. The book value of such assets decreased from $44.4 million at the end of interim 1985 to $42.8 million at the end of interim 1986.

Capital expenditures for welded operations.--The data provided by the seven firms relative to their capital expenditures for land, buildings, and machinery and equipment used in the manufacture of welded stainless steel pipe and tube are shown in table 15. Capital expenditures relating to welded pipe and tube increased from $3.7 million in 1983 to $9.6 million during 1984, then fell to $5.8 million in 1985.

During the interim period ended September 30, 1986, total capital expenditures relating to welded pipe and tube totaled $2.5 million, down from capital expenditures of $4.5 million reported during the interim period ended September 30, 1985.

Research and development expenses.--Research and development expenses relating to seamless and welded stainless steel pipe and tube are shown in the following tabulation for 1983-85 and interim periods 1985-86 (in thousands of dollars):

Item	1983	1984	1985	Interim period ended Sept. 30-- 1985	1986
Seamless pipe & tube...	***	***	***	***	***
Welded pipe & tube.....	1,110	771	582	412	379
Total.....	***	***	***	***	***

Table 15.--Welded stainless steel pipe and tube: Capital expenditures by U.S. producers, 1/ accounting years 1983-85 and interim periods ended Sept. 30, 1985, and Sept. 30, 1986

Item	1983	1984	1985	Interim period ended Sept. 30 2/ 1985	1986
All products of the establishments:					
Land and land improvements 1,000 dollars..	0	2	6	0	6
Building or leasehold improvements.....do....	164	1,528	177	169	142
Machinery, equipment, and fixtures.....do....	3,579	8,021	5,635	4,335	2,380
Total.....do....	3,743	9,551	5,818	4,504	2,528
Number of firms reporting..	7	7	7	7	7
Welded stainless steel pipes and tubes:					
Land and land improvements 1,000 dollars..	0	2	6	0	6
Building or leasehold improvements.....do....	164	1,528	177	169	142
Machinery, equipment, and fixtures.....do....	3,558	8,021	5,635	4,335	2,380
Total.....do....	3,722	9,551	5,818	4,504	2,528
Number of firms reporting..	7	7	7	7	7

1/ The firms are * * *.
2/ 5 firms reported 9 months interim data (Jan. 1 - Sept. 30), 1 firm reported 3 months interim data (July 1 - Sept. 30), and 1 firm reported 12 months interim data (Sept. 1 - Aug. 31).

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

Consideration of the Alleged Threat of Material Injury to an Industry in the United States

Section 771(7)(F)(i) of the Tariff Act of 1930 (19 U.S.C. § 1677(7)(F)(i)) 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 any merchandise, the Commission shall consider, among other relevant factors 1/--
>
> (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, and

---

1/ Section 771(7)(F)(ii) of the act (19 U.S.C. § 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."

(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 736, are also used to produce the merchandise under investigation.

The available information on the nature of the subsidies found by the Department of Commerce (item (I) above) is presented in the section of this report entitled "Nature and extent of subsidies"; the available data on foreign producers' operations (items (II) and (VI) above) are presented in the section entitled "The Swedish stainless steel pipe and tube industry and its capacity to generate exports"; and 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 entitled "Consideration of the causal relationship between the subsidized imports and the alleged material injury." Available information on U.S. inventories of the subject products (item (V)) follows.

Importers' inventories

Stainless steel pipes and tubes.--Inventories of imported stainless steel pipes and tubes from Sweden held by importers are shown in the following tabulation:

	Inventories (short tons)	Ratio of inventories to imports (percent)
As of Dec. 31--		
1983	***	***
1984	***	***
1985	***	***
1986	***	***

Seamless stainless steel pipes and tubes.--Inventories of seamless imports from Sweden, held by the sole importer, Sandvik Steel Co., fluctuated between *** and *** percent of imports during 1983-86 as shown in the following tabulation. The size of its inventories is a reflection of the fact that the bulk of its imports are redraw hollows, which the company uses as feedstock for its U.S. pipe and tube production operation:

	Inventories (short tons)	Ratio of inventories to imports (percent)
As of Dec. 31--		
1983	***	***
1984	***	***
1985	***	***
1986	***	***

Welded stainless steel pipes and tubes.--Inventories of imported welded stainless steel pipes and tubes from Sweden held by importers are shown in the following tabulation:

	Inventories (short tons)	Ratio of inventories to imports (percent)
As of Dec. 31--		
1983.....	***	***
1984.....	***	***
1985.....	***	***
1986.....	***	***

A witness for Avesta testified at the conference held during the preliminary investigation and again at the public hearing that his firm had announced a change in its marketing plans in June 1986, and would no longer stock inventories in the United States. 1/ Avesta also indicated a change in policy to limit the number of distributors to whom it sells.

The Swedish stainless steel pipe and tube industry and its capacity to generate exports

Seamless stainless steel pipes and tubes.--Restructuring of the Swedish stainless steel industry has resulted in the consolidation of all seamless stainless steel pipe and tube production in one firm, AB Sandvik Steel. The firm produces and exports seamless redraw hollows as well as finished pipes and tubes. Exports from AB Sandvik account for all of Sweden's exports of such products to the United States. 1/ Sweden's production of seamless stainless steel pipes and tubes rose steadily by *** percent, from *** short tons in 1983 to *** short tons in 1985 (table 16). Production declined in 1986 to *** short tons. The bulk of Sweden's production is exported; total exports accounted for *** percent of production in 1986. Of these exports, *** percent, or *** short tons, were to the United States. Redraw hollows accounted for over *** percent of exports to the United States during the period of investigation.

Welded stainless steel pipes and tubes.--There is one producer in Sweden of welded stainless steel pipes and tubes, Avesta Sandvik Tube (AST), which is 75 percent owned by Avesta AB and 25 percent owned by Sandvik AB. Exports from AST account for 95 to 100 percent of the total tonnage of welded stainless steel pipes and tubes that enter the United States from Sweden. 2/ Sweden's capacity to produce welded stainless steel pipes and tubes rose by *** percent, from *** short tons in 1983 to *** short tons in 1986 (table 17). Production rose by *** percent during the period, from *** short tons to *** short tons, and capacity utilization increased from *** percent in 1983 to *** percent in 1986.

1/ Transcript I, pp. 136-137; Transcript II, p. 83.
2/ Transcript I, pp. 140 and 143.
3/ Transcript I, pp. 131-132.

Sweden's exports of welded stainless steel pipes and tubes rose from *** short tons in 1983 to *** short tons in 1985, an increase of *** percent. Counsel for AST also provided data showing that only *** percent of AST's sales of stainless steel pipes and tubes in May-October 1986 were to the United States. 1/ The firm's largest export markets were *** and ***. Counsel stated that this pattern was fully reflective of AST's exports during the last few years. Avesta has no plans to expand production capacity or to increase its exports to the United States. 2/

Table 16.--Seamless stainless steel pipes and tubes: Sweden's capacity, production, capacity utilization, domestic shipments, and exports, 1983-86

Item	1983	1984	1985	1986
Capacity.....short tons..	1/	1/	***	***
Production.....do....	***	***	***	***
Capacity utilization.....percent...	1/	1/	***	***
Domestic shipments.....short tons...	***	***	***	***
Exports to--				
United States:				
Redraw hollows.....short tons...	***	***	***	***
Other seamless.....do....	***	***	***	***
Total.....do....	***	***	***	***
Other countries.....do....	***	***	***	***
Grand total.....do....	***	***	***	***

1/ Not available.

Source: Compiled from data submitted by counsel for Sandvik AB.

Table 17.--Welded stainless steel pipes and tubes: Sweden's capacity, production, capacity utilization, domestic shipments, and exports, 1983-86

Item	1983	1984	1985	1986
Capacity.....short tons..	***	***	***	***
Production.....do....	***	***	***	***
Capacity utilization.....percent...	***	***	***	***
Domestic shipments.....short tons...	***	***	***	1/
Exports to--				
United States.....short tons...	1/	1/	1/	1/
Other countries.....do....	1/	1/	1/	1/
Total.....do....	***	***	***	1/

1/ Not available, however, during May-October 1986, *** percent of Avesta's sales of this product were to the home market, *** percent were exported to ***, *** percent to ***, *** percent to ***, and *** percent to other countries. Posthearing brief on behalf of AST, p. 8.

Source: Compiled from data submitted by counsel for Avesta Stainless Tube.

1/ Posthearing brief on behalf of AST, p. 8.
2/ Transcript II, p. 86.

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

U.S. imports

Imports of stainless steel pipes and tubes from Sweden are provided for in TSUS items 610.37, 610.51, and 610.52. For purposes of this report, official statistics of the U.S. Department of Commerce, as adjusted by petitioners, 1/ will be used in our discussion of imports.

Stainless steel pipes and tubes.--Imports of stainless steel pipes and tubes increased steadily from 19,119 short tons in 1983 to 34,895 short tons in 1985. Imports in 1986 increased slightly to 35,055 short tons (table 18). The six countries 2/ listed in the following tabulation accounted for almost 80 percent of the volume of imports in 1986:

Country	Percent of total imports in 1986
Japan	32.5
Sweden	21.9
Canada	12.8
France	4.7
United Kingdom	4.2
West Germany	2.3
All others	21.5
Total	100.0

Imports of stainless steel pipes and tubes from Sweden followed a slightly different trend than total imports. After increasing almost 61 percent between 1983 and 1984, imports from Sweden declined 10 percent to 6,783 short tons in 1985. In 1986, imports from Sweden increased over 13 percent to 7,688 short tons.

1/ Import data have been adjusted as follows: for TSUSA item 610.5229, cold-drawn tubing, only 50 percent of quantity and value for 1983 and 40 percent for 1984, 1985, and 1986 have been included. This represents petitioners' estimate of the stainless steel products contained in this item. TSUSA item 610.5130 has likewise been adjusted to exclude heat-resisting hollow bars. Only 80 percent of this category has been included in the import data base. It should be noted that both of these items accounted for less than 10 percent of imports of Swedish stainless steel pipes and tubes in 1986.
2/ It should be noted that while these six countries accounted for the bulk of imports during the period of investigation, imports from Taiwan increased from zero in 1983 to 3,358 short tons in 1986, representing almost 10 percent of total imports in that year.

Table 18.--Stainless steel pipes and tubes: U.S. imports for consumption, 1983-86

Country	1983	1984	1985	1986
	Quantity (short tons)			
Japan	6,993	13,598	16,568	11,391
Sweden	4,707	7,570	6,783	7,688
Canada	567	1,563	1,449	4,482
France	2,058	2,573	1,655	1,653
United Kingdom	613	1,441	1,485	1,478
West Germany	1,551	967	1,483	809
All other countries	2,630	4,568	5,472	7,554
Total	19,119	32,280	1/34,895	35,055
	C.i.f., duty-paid 2/(1,000 dollars)			
Japan	24,376	39,306	53,085	38,154
Sweden	15,218	24,382	21,474	24,408
Canada	2,164	5,466	6,458	14,072
France	7,906	5,783	4,640	4,304
United Kingdom	2,172	4,525	5,551	5,459
West Germany	6,847	4,353	5,483	2,795
All other countries	9,342	13,264	15,651	20,985
Total	68,025	97,079	112,342	110,177

1/ Official statistics were revised downward by Commerce to reflect the misclassification of 44 short tons of material.
2/ Consists of Customs value plus all freight, insurance, and other charges (including U.S. import duties) incurred in bringing the products to the first port of arrival in the United States.

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

Seamless stainless steel pipes and tubes.--Imports of seamless stainless steel pipes and tubes increased from 13,181 short tons in 1983 to 22,708 short tons in 1985, then fell to 20,513 short tons in 1986, representing a decrease of almost 10 percent (table 19). Six countries accounted for 83 percent of total imports in 1986 as shown in the following tabulation:

Country	Percent of total imports in 1986
Japan	40.3
Sweden	23.7
France	6.9
United Kingdom	6.2
West Germany	3.8
Canada	2.4
All others	16.7
Total	100.0

Table 19.--Seamless stainless steel pipes and tubes: U.S. imports for consumption, 1983-86

Country	1983	1984	1985	1986
	Quantity (short tons)			
Japan	5,185	6,044	10,193	8,258
Sweden	3,551	5,726	4,592	4,866
France	844	2,500	1,580	1,417
United Kingdom	554	1,390	1,329	1,271
West Germany	686	776	1,352	788
Canada	133	241	236	492
All other countries	2,228	3,318	3,427	3,421
Total	13,181	19,995	1/22,708	20,513
	C.i.f., duty-paid 2/(1,000 dollars)			
Japan	19,584	21,849	37,478	29,632
Sweden	11,537	18,981	16,000	17,074
France	1,961	5,473	4,254	3,455
United Kingdom	2,062	4,262	4,801	4,674
West Germany	3,025	3,467	4,883	2,693
Canada	753	1,793	1,344	2,416
All other countries	8,019	10,004	10,374	10,740
Total	46,941	65,828	79,134	70,685

1/ Official statistics were revised downward by Commerce to reflect the misclassification of 44 short tons of material.
2/ Consists of Customs value plus all freight, insurance, and other charges (including U.S. import duties) incurred in bringing the products to the first port of arrival in the United States.

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

All imports of seamless stainless steel pipes and tubes from Sweden during the period covered by this investigation were produced and exported by AB Sandvik Steel, which Commerce excluded from its final affirmative countervailing duty determination. Imports of seamless stainless steel pipes and tubes from Sweden rose sharply from 3,551 short tons in 1983 to 5,726 short tons in 1984, representing an increase of 61 percent. Imports declined by 20 percent in 1985 to 4,592 short tons, but increased by 6 percent in 1986 to 4,866 short tons.

During the period January 1983 to June 1986, Sandvik Steel Co. reported that *** percent of its imports from Sweden were redraw hollows, of which *** percent were used in Sandvik's redrawing operation. Representatives of the firm also testified that up to 50 percent of the firm's sales were products utilizing special Sandvik alloys that don't compete in the pipe and hollow bar markets in which Al Tech and Combustion Engineering meet low-cost import competition. 1/

1/ Transcript III, pp. 65, 66, 80, and 81.

Welded stainless steel pipes and tubes.--After rising over 100 percent between 1983 and 1984, welded imports leveled off at 12,187 short tons in 1985 (table 20). In 1986, imports increased almost 20 percent to 14,542 short tons. The following tabulation lists the percentage distribution of imports from the six countries that accounted for about 72 percent of imports in 1986:

Country	Percent of total imports in 1986
Canada	27.4
Japan	21.6
Sweden	19.4
France	1.6
United Kingdom	1.4
West Germany	.1
All other	28.4
Total	100.0

Table 20.--Welded stainless steel pipes and tubes: U.S. imports for consumption, 1983-86

Country	1983	1984	1985	1986
	Quantity (short tons)			
Canada	434	1,321	1,213	3,991
Japan	1,808	7,554	6,376	3,134
Sweden	1,156	1,844	2,191	2,822
France	1,214	74	75	236
United Kingdom	58	52	156	207
West Germany	864	191	132	21
All other countries	404	1,250	2,046	4,133
Total	5,939	12,286	12,187	14,542
	C.i.f., duty-paid 1/(1,000 dollars)			
Canada	1,411	3,673	5,114	11,655
Japan	4,792	17,457	15,607	8,522
Sweden	3,681	5,401	5,474	7,333
France	5,945	310	386	849
United Kingdom	110	264	751	785
West Germany	3,822	886	599	103
All other countries	1,323	3,261	5,276	10,245
Total	21,085	31,252	33,208	39,492

1/ Consists of Customs value plus all freight, insurance, and other charges (including U.S. import duties) incurred in bringing the products to the first port of arrival in the United States.

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

Unlike the trend for overall imports, welded stainless steel pipes and tubes from Sweden increased throughout the period of investigation. Such imports increased 90 percent from 1,156 short tons in 1983 to 2,191 short tons in 1985, and an additional 29 percent in 1986 to 2,822 short tons. It should be noted that imports from Canada and Taiwan also increased sharply in 1986. Imports from these countries accounted for 27.4 percent and 22.5 percent of imports in 1986, respectively.

Data on imports of stainless steel pipes and tubes were also provided by respondents to the Commission's questionnaires. The volume of imports and the overall trends were generally similar for the two data sources, although questionnaire data show a much greater increase in imports of the welded product from 1984 to 1985 and a slight decline in seamless imports from 1985 to 1986, as shown in the following tabulation (in short tons):

Imports from Sweden	1983	1984	1985	1986
Welded	***	***	***	***
Seamless 1/	***	***	***	***
Total	***	***	***	***

1/ Includes redraw hollows and hollow bars.

Data on imports of seamless redraw hollows, hollow bars, and other seamless stainless steel pipes and tubes from Sweden were provided by Sandvik Steel Company in its response to the Commission's questionnaire. The data are presented in the following tabulation (in short tons):

Imports from Sweden	1983	1984	1985	1986
Redraw hollows	***	***	***	***
Hollow bars	***	***	***	***
Other seamless	***	***	***	***
Total	***	***	***	***

Market penetration by imports

Stainless steel pipes and tubes.--Imports from Sweden increased over 60 percent from 1983 to 1984, then declined 10 percent in 1985. Such imports increased by over 13 percent in 1986 when compared with imports in 1985. The share of the market accounted for by imports from Sweden increased from 5.7 percent in 1983 to 7.9 percent in 1984, decreased to 6.8 percent in 1985, then increased to 8.1 percent in 1986 (table 21). 1/

1/ Data on market penetration based on value are presented in table C-3.

Seamless stainless steel pipes and tubes.--Imports from Sweden increased sharply from 1983 to 1984 before declining in 1985. Imports increased slightly in 1986. The ratio of imports from Sweden to apparent consumption reached a peak of 21.3 percent in 1984, declined to 15.7 percent in 1985, but recovered somewhat to 18.5 percent in 1986. 1/

Welded stainless steel pipes and tubes.--The share of the market for welded stainless steel pipes and tubes accounted for by imports from Sweden increased from a low of 1.9 percent in 1983 to 3.1 percent in 1985, and then to 4.1 percent in 1986.

Table 21.--Stainless steel pipes and tubes: Market penetration of imports subject to investigation, by quantity, 1983-86

(In percent)

Item	1983	1984	1985	1986
Seamless:				
U.S. producers	37.4	25.8	22.2	22.2
Sweden 1/	16.9	21.3	15.7	18.5
All other countries	45.7	52.9	62.1	59.3
Total	100.0	100.0	100.0	100.0
Welded:				
U.S. producers	90.2	82.1	82.7	78.9
Sweden	1.9	2.7	3.1	4.1
All other countries	7.9	15.2	14.2	17.0
Total	100.0	100.0	100.0	100.0
Total:				
U.S. producers	76.6	66.2	65.0	63.2
Sweden	5.7	7.9	6.8	8.1
All other countries	17.6	25.9	28.2	28.7
Total	100.0	100.0	100.0	100.0

1/ All imports of seamless stainless steel pipes and tubes from Sweden during the period covered by this investigation were produced and exported by AB Sandvik Steel, which Commerce excluded from its final affirmative countervailing duty determination.

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

Note.-- Figures may not add to totals due to rounding.

1/ All imports of seamless stainless steel pipes and tubes from Sweden during the period covered by this investigation were produced and exported by AB Sandvik Steel, which Commerce excluded from its final affirmative countervailing duty determination.

Prices

Introduction.--Prices received for stainless steel pipes and tubes are determined by several factors including whether seamless or welded, the ASTM or ASME category specified, the grade of steel, the diameter and wall thickness desired, and whether specific lengths or random lengths are required.

Seamless pipes and tubes are more expensive to produce than the welded products and are generally used where substantial wall thickness or small diameters are desired, and strength, pressure, and reliability are major considerations. Welded products are generally used for applications requiring thinner wall thickness or larger diameter. Buyers of the seamless and welded stainless steel pipes and tubes who responded during the current investigation to the Commission's purchaser questionnaire generally stated that seamless could be substituted for welded, but such substitution usually does not occur because of the sizable price premium for the seamless products, which reportedly ranges from 15 to 200 percent depending on dimensions and steel grades of the various products. 1/ Although some pipe and tube applications can use either seamless or welded, a number of buyers still prefer the seamless product despite the price advantage of the welded product. 2/

U.S. producers of the subject stainless steel pipes and tubes generally quote their prices both f.o.b. mill and delivered, in dollars per foot or per hundred feet, with some publishing price lists. Importers quote prices both on an f.o.b. port-of-entry or U.S. warehouse basis and on a delivered price basis. Some U.S. producers equalize freight with the domestic mill nearest to the specific customer. 3/ Transportation costs of the stainless steel pipes and tubes, which are shipped primarily by truck, typically range up to 5 percent of the final delivered price. Purchasers reported in their questionnaire responses that transportation costs in the U.S. market to deliver the stainless steel pipes and tubes to their establishments generally are not a major factor in the choice of their sources. Therefore, mills located close to their markets may have only a slight sales advantage over more distant producers. Transportation costs are discussed in more detail immediately following the price section.

1/ See appendix D for a full discussion of purchaser responses to questions concerning competition between seamless and welded stainless steel pipes and tubes.

2/ Questionnaire price data reported by producers and importers during the preliminary investigation show that for the same ASTM/ASME specifications, steel grade, and dimensions, the seamless product was consistently priced above the welded product during January 1983-June 1986, although the price difference apparently narrowed during the period. The price of the domestic seamless product averaged $2.84 per foot more or about 44 percent above the price of the domestic welded product (appendix D). Based on only limited price data of the imported Swedish pipes and tubes, the price premium of the imported seamless tube product averaged about 57 percent (appendix D).

3/ In the practice of freight equalization a U.S. producer supplying a customer located closer to a competing producer will absorb any differences in freight. The more distant producer charges the customer's account for freight costs as if the product were shipped from the closer producer.

Domestic and imported stainless steel pipes and tubes are sold to distributors or end users. Sales to distributors are characterized by large volume shipments of standard items, whereas sales to end users are typically small volume shipments of more specialized products. In addition, both domestic producers and importers of the Swedish products also sell semifinished seamless redraw hollows to redrawers who "draw" these products into finished stainless steel pipes and tubes to diameters and wall thicknesses specified by end users. 1/

Questionnaire price data.--Quarterly net f.o.b. (U.S. locations) and delivered selling price data for five representative stainless steel pipe and tube products were requested during the current investigation from U.S. producers and from importers of the Swedish stainless steel pipes and tubes subject to this investigation on their sales during January 1983-December 1986. The five representative products are as follows:

Seamless

Product 1: ASTM-A-312 or ASME-SA-312, seamless, grade AISI 316, 3-inch schedule 40 (3.5 inches OD X .216 inch WT), hot-finished or cold-rolled, mill-standard random lengths.

Product 2: ASTM-A-511 with chemistry to A-479, seamless, grade AISI 304, 2.563 inches OD X .420 inch WT, hot-finished or cold-rolled, mill-standard random lengths.

Product 3: Grade AISI 304, seamless, 1.315 inches OD X .133 inch WT, hot-finished or cold-rolled, 30-foot mill random lengths (ranging from 24-30 feet) (Commonly referred to as redraw hollows).

Welded

Product 4: ASTM-A-312 or ASME-SA-312, welded, grade AISI 304 or 304L, 2-inch schedule 40 (2.375 inches OD X .154 inch WT), mill-standard random lengths.

Product 5: ASTM-A-249 or ASME-SA-249, welded, grade AISI 316 or 316L, 2-inch OD X .083 inch (average or minimum) WT, mill-standard random lengths.

The price data for each product were requested for their primary market: price data for the seamless product 1 and welded products 4 and 5 were requested on sales to distributors, price data for the seamless product 2 were requested on sales to end users, and price data for the seamless product 3 were requested on sales to redrawers.

1/ Based on Sandvik's questionnaire response, during 1986 about *** percent of its redraw hollows imported from Sweden were sold to U.S. redraw mills. The remainder, the bulk of their redraw hollows imported from Sweden, were reportedly used by the importer at its redraw mill, located in Scranton, PA, to produce finished stainless steel pipes and tubes in the United States.

Price trends discussed in this report are based on the net delivered selling prices reported by U.S. producers and importers in their questionnaire responses during the current and preliminary investigations. 1/ Indexes of U.S. producers' net selling prices of products 1-4 and indexes of the imported Swedish net selling prices of products 1 and 4, all reported during the current investigation, are shown in table 22. 2/ Price trends are also shown for net delivered selling price data on one seamless product and two welded products received from U.S. producers and importers during the preliminary investigation. These latter three pipe and tube products are identified in appendix F, and the price indexes are shown in table F-1.

The Commission also requested during the current investigation quarterly net delivered price data for four representative products from large U.S. buyers of the domestic and imported Swedish stainless steel pipes and tubes on their purchases during January 1985-December 1986, and bid price information on their two largest volume purchases of seamless stainless steel mechanical tubes and redraw hollows during 1985 and 1986 that involved competition between the domestic and imported Swedish products. 3/ The four representative products are described below:

Seamless

Product 6: ASTM-A-312 or ASME-SA-312, seamless, grade AISI 316, 3-inch schedule 40 (3.5 inches OD X .216 inch WT), hot-finished or cold-rolled, mill-standard random lengths.

Welded 4/

Product 7: ASTM-A-312 or ASME-SA-312, welded, grade AISI 304, 304L, 316, or 316L, 1/2-inch schedule 40 (.840 OD X .109 inch WT), mill-standard random lengths.

1/ Except for product 4 where reported f.o.b. prices (not shown) are used because of a more complete response by U.S. producers. The weighted-average delivered prices and quantities of the representative domestic and imported Swedish pipe and tube products, reported by producers and importers during the current investigation, are shown in appendix tables E-1 through E-5.

2/ The questionnaire price data were reported during the current investigation by 7 U.S. producers and 2 U.S. importers of the subject pipes and tubes. The responding U.S. producers accounted for about *** percent of total reported domestic shipments of the seamless pipes and tubes (including redraw hollows) in 1986, and 48 percent of total reported domestic shipments of the welded pipes and tubes. The responding U.S. importers accounted for 100 percent of both total U.S imports of the Swedish seamless (including redraw hollows) and welded pipes and tubes during 1986. For individual product coverage, see notes at the bottom of appendix E tables. The responding U.S. producers and importers did not necessarily respond for all products or all periods requested.

3/ Because of the product diversity of seamless stainless steel mechanical tubing and redraw hollows, the Commission requested bid price information in the purchaser questionnaires.

4/ Prices of these welded products were requested separately for each of the grades shown, but purchasers who bought all four grades in a specific product category were required to report for only two grades.

Product 8: ASTM-A-312 or ASME-SA-312, welded, grade AISI 304, 304L, 316, or 316L, 2-inch schedule 40 (2.375 OD X .154 inch WT), mill-standard random lengths.

Product 9: ASTM-A-312 or ASME-SA-312, welded, grade AISI 304, 304L, 316, or 316L, 4-inch schedule 40 (4.500 OD X .237 inch WT), mill-standard random lengths.

The price comparisons discussed in this report are based on net delivered purchase prices reported during the current investigation by U.S. purchasers of the subject seamless and welded stainless steel pipes and tubes. 1/ Price comparisons between the domestic and imported Swedish pipe and tube products 7-9, based on delivered purchase prices reported in purchaser questionnaires, are shown in tables 23 and 24, 2/ and delivered price comparisons based on bid price data reported by the purchasers are shown in table 25.

1/ The questionnaire price data were reported during the current investigation by 10 U.S. purchasers for products 6-9, and by 3 U.S. purchasers (2 of these also reported for the latter products) for the bid price information. The 11 responding U.S. purchasers accounted for about 25 percent of total reported domestic shipments of the seamless (including redraw hollows) stainless steel pipes and tubes in 1986, and for about 9 percent of the total seamless stainless steel products imported from Sweden during this period. These purchasers also accounted for about 11 percent of total reported domestic shipments of the welded pipes and tubes in 1986, and for about 29 percent of the total welded products imported from Sweden during this period. The responding U.S. purchasers did not necessarily report for all products or all periods requested.

2/ The reported net delivered prices and quantities are shown in appendix G, tables G-1 and G-2, for the periods and products where price comparisons between the domestic and imported Swedish welded pipe and tube products were possible. These purchase price data were aggregated into three geographic markets where similar conditions of competition and transportation exist. The market areas are identified in appendix G. No delivered purchase price comparisons were possible for seamless product 6.

Price trends of producers' prices.--Based on U.S. producers' questionnaire responses during the current investigation, quarterly net selling prices of the domestic stainless steel seamless pipe and tube products generally fell during the periods reported, whereas domestic producers' prices for the one welded product for which full-period data were reported rose (table 22). 1/ U.S. producers' reported delivered selling prices of the domestic seamless hot-finished product 1 sold to distributors fell by about 16 percent during January 1983-December 1986, whereas delivered prices of the seamless cold-rolled product 1 fell by approximately 29 percent. U.S. producers' delivered selling prices of the seamless cold-rolled product 2 sold to end users also fell during this period, by approximately 12 percent. 2/ But delivered selling prices of the cold-rolled product 3 sold to redrawers fluctuated widely before ending, in July-September 1986 (the latest period for which price data were reported), at the same level as in January-March 1983. For the domestic welded product 4 sold to distributors, U.S. producers' reported quarterly f.o.b. selling prices fluctuated but rose by about 2 percent during January 1983-December 1986 (table 22).

Indexes of U.S. producers' prices of selected commodity categories and of earnings of production workers in domestic pipe and tube mills, reported by the U.S. Departments of Labor (Bureau of Labor Statistics (BLS)) and Commerce, are shown in appendix H for comparison with price trends of the domestic stainless steel seamless and welded pipe and tube products reported by U.S. producers in questionnaire responses. 3/ As shown in appendix G, price trends of the stainless steel seamless and welded pipe and tube products reported in questionnaire responses appear generally to lag behind U.S. producers' price increases in other product categories reported by BLS, especially those products which are major inputs in the production of the stainless steel seamless and welded pipes and tubes.

1/ During the preliminary investigation, U.S. producers provided pricing information on one other seamless pipe product (P-1) and two other welded pipe and tube products (P-5 and P-6), by quarters, during January 1983-June 1986. These products are identified in appendix F and indexes of the reported delivered prices are shown in table F-1. The reported delivered selling prices of the domestic seamless product P-1 fell by 34 percent during January 1983-June 1986. But delivered selling prices of the domestic welded product P-5 rose by about 3 percent during this period, whereas prices of the domestic welded product P-6 fell by 22 percent. The apparent 34-percent fall in prices of the seamless product P-1 was associated with early high sales prices for a single reporting producer selling a very small volume. Later prices of product P-1 were for substantially higher volume sales and were averages of several producers' data.

2/ Much of the decline in U.S. producers' prices of the seamless cold-rolled products 1 and 2 occurred by the end of 1984; prices of these products were then relatively stable during 1985 and 1986.

3/ Comparisons of price trends from questionnaire data and BLS data may not be advisable in some instances, especially where the BLS data are based on list rather than transaction price data, even though transaction prices were requested.

Table 22.--U.S. and imported Swedish stainless steel pipes and tubes: Indexes of net selling prices of representative stainless steel pipe and tube products, by seamless or welded, by type of customer, by hot-finished or cold-rolled for the seamless products, and by quarters, January 1983-December 1986 1/

Period	Seamless					Welded	
	Product 1 sold to distributors			Product 2 to end users	Product 3 to redrawers	Product 4 sold to distributors 2/ 3/	
	Hot-finished		Cold-rolled	Cold-rolled	Cold-rolled		
	U.S.	Swedish	U.S.	U.S.	U.S.	U.S.	Swedish
1983:							
Jan.-Mar.....	100.0	***	100.0	100.0	100.0	100.0	-
Apr.-June....	-	***	77.7	99.5	98.8	93.9	-
July-Sept....	-	***	82.3	105.0	96.2	103.9	-
Oct.-Dec.....	-	***	79.1	102.8	124.3	104.8	-
1984:							
Jan.-Mar.....	83.6	***	62.0	91.1	84.0	104.4	-
Apr.-June....	80.4	***	63.0	87.9	85.2	105.6	-
July-Sept....	-	***	69.8	88.4	78.3	106.5	-
Oct.-Dec.....	80.4	***	67.1	87.9	98.6	102.9	-
1985:							
Jan.-Mar.....	80.5	***	71.1	87.3	80.4	102.7	***
Apr.-June....	93.3	***	68.3	87.9	97.4	101.2	***
July-Sept....	99.6	***	69.9	88.7	73.0	102.4	***
Oct.-Dec.....	79.8	***	71.1	88.2	86.6	101.7	***
1986:							
Jan.-Mar.....	82.8	***	70.7	86.7	90.9	103.1	***
Apr.-June....	-	***	75.0	85.8	65.4	103.4	***
July-Sept....	97.0	***	66.4	84.8	100.0	106.8	***
Oct.-Dec.....	84.4	***	70.7	88.4	-	101.9	***

1/ Unless otherwise specified, the price indexes were developed from net delivered selling price data reported by U.S. producers and importers of the specified domestic and Swedish stainless steel pipe and tube products.
2/ The price indexes for the domestic and imported-Swedish product 4 were developed from net f.o.b. selling price data reported by U.S. producers and importers, because for this product category more U.S. producers responded on an f.o.b. price basis than on a delivered price basis, whereas the two responding importers reported on both price bases. The actual reported net f.o.b. price data are not shown in this report, although indexes of these data are presented above.
3/ Grade 304 and based on average wall thickness.

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

Note: Unless otherwise shown, January-March 1983=100.

Price trends of importers' prices.--Based on U.S. importers' questionnaire responses during the current investigation, quarterly net delivered prices of the imported Swedish stainless steel seamless and welded pipe and tube products generally fell during the periods reported (table 22). 1/ U.S. importers' delivered selling prices of the imported Swedish seamless hot-finished product 1 sold to distributors fell by about *** percent during January 1983-December 1986. Based on limited reported data, U.S. f.o.b. selling prices of the imported Swedish welded product 4 sold to distributors fell by about *** percent during January 1985-December 1986. 2/ Insufficient price data were reported to develop meaningful price trends for the other requested imported Swedish products.

Price comparisons.--The reported net delivered purchase price data, based on questionnaire data reported by U.S. purchasers during the current investigation, resulted in 30 quarterly price comparisons between the domestic and imported Swedish stainless steel welded products 7-9 in 3 geographic market areas during January 1985-December 1986 (tables 23 and 24). 3/ In addition to these quarterly delivered price comparisons for welded products, three responding purchasers also reported bid price information for their two largest purchases of seamless stainless steel mechanical tubing and redraw hollows during 1985-86. Delivered purchase price comparisons, on a bid basis, were possible for 12 orders involving the seamless products (table 25).

Of the 30 quarterly delivered purchase price comparisons based on purchaser questionnaire returns during the current investigation, 16 were in the Eastern market, and 7 each were in the Midwestern and Western markets (tables 23 and 24). Fourteen of sixteen quarterly delivered price comparisons between the domestic and imported Swedish welded products 7-9 in the Eastern U.S. market showed the Swedish products to be priced less than the domestic products, ranging from less than 0.5 percent to 15 percent below domestic prices (table 23). The lower prices of the Swedish products averaged about 10 percent below the domestic prices. All seven quarterly price comparisons in the Midwestern market and six of seven price comparisons in the Western market showed the Swedish products to be priced less than the domestic products (table 24). 4/ In the Midwestern market, the lower delivered

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1/ During the preliminary investigation, U.S. importers provided pricing information on one other welded pipe product (P-5) for which price trends could be developed, by quarters, during January 1985-June 1986. This product is identified in appendix F and the delivered price data and indexes of the reported prices are shown in table F-1. The reported delivered selling prices of the imported Swedish welded product P-5 sold to distributors fell by almost *** percent during January 1985-June 1986. In comparison, during this period U.S. producers' reported prices of welded product P-5 sold to distributors fell by less than *** percent (table F-1).

2/ During the same period, U.S. producers' reported f.o.b. prices of the welded product 4 sold to distributors fell by about *** percent.

3/ Based on returns of purchaser questionnaires, the reported net delivered purchase price data were aggregated into the following three U.S. market areas, where similar conditions of competition and transportation exist: Eastern U.S.--New Jersey and Pennsylvania; Midwestern U.S.--Indiana, Illinois, Michigan, and Wisconsin; and Western U.S.--Oklahoma and Texas.

4/ The Midwestern market covered the welded products 7 and 8, and the Western market covered the welded products 7-9.

Table 23.--Stainless steel welded pipe and tube products 7-9 purchased by distributors in the Eastern U.S. market: Net delivered purchase prices of the representative domestic and imported Swedish pipe and tube products purchased by distributors and margins of under/(over) selling, by steel grades, and by quarters, January 1985-December 1986 1/

Item	U.S.	Swedish	Average margins of under/(over) selling 2/	
	Dollars/linear foot			Percent
Product 7, grade 304				
1986:				
April-June	***	***	$0.10	6
Product 7, grade 316				
1986:				
January-March	***	***	0.31	15
July-September	***	***	0.30	13
Product 8, grade 304				
1985:				
April-June	***	***	(0.04)	(1)
October-December	***	***	(1.39)	(34)
1986:				
July-September	***	***	0.51	11
October-December	***	***	0.56	12
Product 8, grade 316				
1986:				
January-March	***	***	0.61	10
April-June	***	***	0.01	3/
July-September	***	***	0.85	14
Product 9, grade 304				
1985:				
April-June	***	***	0.31	3
July-September	***	***	1.16	10
1986:				
April-June	***	***	0.86	7
July-September	***	***	1.48	12
October-December	***	***	1.25	10
Product 9, grade 316L				
1986:				
April-June	***	***	1.92	11

1/ The price data were developed from quarterly net delivered purchase price data reported by U.S. purchasers of the representative U.S. and imported Swedish welded stainless steel pipe and tube products. The Eastern U.S. market encompasses New Jersey and Pennsylvania.
2/ Any figures in parentheses indicate that the price of the domestic product was less than the price of the imported Swedish product.
3/ Less than 0.5 percent.

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

Table 24.--Stainless steel welded pipe and tube products 7-9 purchased by distributors in the Midwestern and Western U.S. markets: Net delivered purchase prices of the representative domestic and imported Swedish pipe and tube products purchased by distributors and margins of under/(over) selling, by U.S. market areas, by steel grades, and by quarters, January 1985-December 1986 1/

Item	U.S.	Swedish	Average margins of under/(over) selling 2/	
	Dollars/linear foot			Percent
MIDWESTERN MARKET				
Product 7, grade 304				
1986:				
April-June	***	***	$0.05	3
July-September	***	***	0.15	9
Product 7, grade 316				
1986:				
April-June	***	***	0.07	3
October-December	***	***	0.20	9
Product 8, grade 304				
1985:				
April-June	***	***	0.05	1
October-December	***	***	0.25	6
Product 8, grade 316				
1986:				
October-December	***	***	0.37	6
WESTERN MARKET				
Product 7, grade 316				
1986:				
January-March	***	***	0.29	14
April-June	***	***	0.28	14
Product 8, grade 316				
1986:				
January-March	***	***	0.83	13
April-June	***	***	0.57	10
Product 9, grade 316L				
1986:				
January-March	***	***	1.95	12
April-June	***	***	2.47	14
July-September	***	***	(0.33)	(2)

1/ The price data were developed from quarterly net delivered purchase price data reported by U.S. purchasers of the representative U.S. and imported Swedish welded stainless steel pipe and tube products. The Midwestern U.S. market encompasses Indiana, Illinois, Michigan, and Wisconsin; the Western U.S. market encompasses Oklahoma and Texas.

2/ Any figures in parentheses indicate that the price of the domestic product was less than the price of the imported Swedish product.

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

prices of the imported Swedish products averaged about 5 percent below domestic delivered prices, whereas in the Western market the lower prices of the Swedish products averaged about 13 percent below domestic delivered prices. By regions, delivered prices of the imported Swedish welded products were substantially below the domestic delivered prices in the Eastern and Western regions compared with the Midwestern region.

Based on the bid price information reported by purchasers during the current investigation, two purchasers reported receiving delivered price quotes for eight orders of the seamless mechanical tubing during 1985-86 that involved competition between the domestic and imported Swedish products, and one purchaser reported receiving competing delivered price quotes for four orders of the seamless redraw hollows during this period (table 25). In four of the eight purchases of mechanical tubing, involving 4,716 feet purchased during 1985, the imported Swedish products were awarded the orders. In these four awarded orders, prices of the imported Swedish products were less than prices of the U.S. products, ranging from 11 to 14 percent below the quoted domestic prices. Reasons cited by purchasers for buying the imported products instead of the domestic products were lower prices of the imported products, and, in two of these purchases reported by ***, 1/ an agreement by *** to warehouse the * * * mechanical tubing for a longer period than would *** or ***, the two competing domestic suppliers. In four other purchases of mechanical tubing, involving 6,500 feet purchased in 1986, the U.S. suppliers were awarded the orders. In two of these latter orders, purchased by ***, the domestic prices exceeded prices of the competing imported Swedish products by 10 and 7 percent. In two other orders, purchased by ***, 2/ the domestic prices were slightly lower than prices of the Swedish products but exceeded prices quoted for competing Japanese products by 7 and 4 percent. 3/ Purchasers cited quicker delivery and smaller quantities per purchase offered by the domestic suppliers as the reasons for buying the higher priced domestic products.

Of the four orders for the seamless redraw hollows, one order, involving 14,290 feet purchased during 1985, was awarded to the supplier of the Swedish product. The reporting firm, ***, * * *, cited the approximately 9 percent lower price of the Swedish redraw hollow compared with the qouted price of the domestic redraw hollow as the reason for buying the foreign instead of the domestic product. In the other three orders for redraw hollows, involving 47,360 feet purchased in 1985 and 1986, *** awarded the competing U.S. supplier (***) the orders, although the domestic prices were consistently greater than prices of the competing imported Swedish products. Domestic prices in these latter three orders ranged from 9 to 10 percent above the prices of the Swedish products. *** indicated that quick delivery of the material was critical in these instances and the principal reason for buying the domestic redraw hollows was that the U.S. supplier could deliver in 8 weeks compared with 12-14 weeks for the supplier of the imported Swedish products.

1/ * * *.

2/ * * *.

3/ * * * reported in its questionnaire response that it did not buy any Swedish seamless stainless steel *** during 1985 and 1986, because it was not priced competitively with lower priced *** from Japan, the Republic of Korea, and the United Kingdom.

Table 25.--Seamless stainless steel mechanical tubing and redraw hollows: Delivered prices quoted on U.S. orders of seamless stainless steel mechanical tubing and redraw hollows that involved competition between domestic and imported Swedish products, 1/ by product categories, by individual orders, 1985-86

Item	Quantity	Quoted delivered prices	Country of origin	Awarded price quote was-- less than losing quotes	Awarded price quote was-- greater than losing quotes
	feet	per foot		Percent	
Mechanical tubing					
1985:					
Order 1	708	***	2/ Sweden	-	-
(***)		***	U.S.	14	-
		***	U.S.	14	-
Order 2	708	***	2/ Sweden	-	-
(***)		***	U.S.	11	-
		***	U.S.	14	-
Order 3	1,525	***	2/ Sweden	-	-
(***)		***	Japan	10	-
		***	U.S.	14	-
Order 4	1,775	***	2/ Sweden	-	-
(***)		***	Japan	10	-
		***	U.S.	14	-
1986:					
Order 1	700	***	Sweden	-	10
(***)		***	2/ U.S.	-	-
		***	U.S.	8	-
Order 2	600	***	Sweden	-	7
(***)		***	2/ U.S.	-	-
Order 3	2,200	***	Japan	-	7
(***)		***	2/ U.S.	-	-
		***	Sweden	0.5	-
Order 4	3,000	***	Japan	-	4
(***)		***	2/ U.S.	-	-
		***	Sweden	0.5	-

See notes at the end of the table.

Table 25.--Seamless stainless steel mechanical tubing and redraw hollows: Delivered prices quoted on U.S. orders of seamless stainless steel mechanical tubing and redraw hollows that involved competition between domestic and imported Swedish products, 1/ by product categories, by individual orders, 1985-86--Continued

	Quantity	Quoted delivered prices	Country of origin	Awarded price quote was--less than losing quotes	Awarded price quote was--greater than losing quotes
	feet	per foot		Percent	
Redraw hollows					
1985:					
Order 1	14,290	***	2/ Sweden	-	-
(***)		***	U.S.	9	-
Order 2	19,635	***	Sweden	-	9
(***)		***	2/ U.S.	-	-
1986:					
Order 1	19,025	***	Sweden	-	9
(***)		***	2/ U.S.	-	-
Order 2	8,700	***	Sweden	-	10
(***)		***	2/ U.S.	-	-

1/ Purchasers were requested to provide delivered bid-price data for their two largest orders of seamless stainless steel mechanical tubing and redraw hollows in 1985 and in 1986 that involved competition between the domestic and imported Swedish products.
2/ Awarded order.
Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Note.--* * *; * * *; and * * *.

Purchasers' questionnaire responses concerning competition between the domestic and imported seamless and welded stainless steel pipes and tubes.--The Commission requested purchasers to report on competitive conditions between the domestic and imported Swedish stainless steel pipes and tubes based on their actual purchase experiences during 1985-86. Twelve distributors, one end user, and two redraw mills responded to at least some portions of this section of the purchaser questionnaire, but not everyone responded to all the questions asked. Purchasers were asked to compare any product differences between the domestic and the imported Swedish pipes and tubes by physical product characteristics, by reliability of supply, and by order lead times. 1/ Purchasers were also requested to compare the delivered purchase prices of the domestic and imported Swedish stainless steel pipes and tubes, and to give reasons why they purchased the subject imported or domestic products.

Product differences.--Purchasers' comments regarding physical product characteristics and supply reliability of the seamless and welded stainless steel pipes and tubes produced domestically and imported from Sweden showed no clear differences between the domestic and imported Swedish products, 2/ but their comments regarding order lead times generally indicated that the imported Swedish supply was considered less favorable than the domestic supply. The responding purchasers cited order lead times of 8-26 weeks when buying the imported Swedish products compared with lead times up to 10 weeks when buying the domestic products. Long lead times require large purchases per order and therefore high inventory carrying costs. Purchasers regarded the costs of long order lead times as a significant factor in deciding whether to purchase the domestic or imported Swedish stainless steel pipes and tubes. Comments of purchasers regarding order lead times and other factors affecting the prices of the domestic versus imported Swedish stainless steel pipes and tubes follow below.

Pricing differences.--The 11 purchasers responding to this section of the questionnaire indicated that delivered prices of the imported Swedish seamless and welded pipes and tubes generally must be less than domestic prices before they will consider purchasing the foreign products. Minimum price differences cited by these purchasers ranged from 1 to 20 percent of the delivered domestic prices. 3/ Purchasers cited most frequently the longer lead times of the imported Swedish products vis-a-vis the domestic products as a factor requiring a lower price of the Swedish products. These purchasers also reported buying the domestic seamless and welded pipes and tubes when they were more expensive than the imported Swedish products, citing most frequently the shorter lead times of the domestic versus the subject foreign products and in some instances noting better quality, more reliable supply, or customer preference for the domestic versus the imported Swedish products.

1/ Purchasers were also asked to comment on any other factors they considered important, but none did.

2/ The responding purchasers generally agreed that the quality of the domestic seamless and welded stainless steel pipes and tubes was equal to the quality of the imported Swedish products, and for the seamless pipes and tubes the domestic and imported products were regarded equal in terms of supply reliability. But the six purchasers comparing supply reliability of the U.S. and Swedish welded products were evenly split, three indicating that the imported Swedish supply was less reliable and three indicating the imported Swedish supply was more reliable than the domestic supply.

3/ Purchasers also stated that in their market areas delivered prices of the Swedish seamless and welded pipes and tubes were generally less than delivered prices of the domestic products.

Transportation factors

U.S. producers of the subject stainless steel pipes and tubes and U.S. importers of the Swedish pipes and tubes were requested during the preliminary investigation to report information on the extent of their marketing areas in the United States and on U.S. inland transportation costs to deliver these products to their customers. Ten U.S. producers and two importers responded to this section of the questionnaire. The reporting U.S. producers and importers typically ship the subject products by truck and sometimes by rail in the U.S. market, absorbing at least some of the U.S. inland freight costs to their customers. U.S. producers reported average delivery costs to their largest customers of about 2 percent of the delivered prices, whereas the lone reporting importer of this information, Avesta Stainless, Inc., of Totowa, NJ, reported an average U.S. delivery cost to its largest customer of about *** percent of the delivered price.

U.S. producers and importers of the seamless pipes and tubes appear to absorb less U.S. inland freight costs than the U.S. producers and importers of the welded products, despite U.S. producers and importers reportedly selling both the seamless and welded products nationwide. The responding U.S. producers and importers of the seamless pipes and tubes consistently reported absorbing 10 percent or less of U.S. inland freight costs on at least 65 percent of their shipments, whereas the responding U.S. producers and importers of the welded pipes and tubes generally reported absorbing more than 50 percent of U.S. inland freight charges on at least 70 percent of their shipments.

Exchange rates

Quarterly data reported by the International Monetary Fund indicate that, despite depreciating earlier in the period, the nominal value of the Swedish krona appreciated relative to the U.S. dollar by approximately 6 percent during January 1983-September 1986--the latest period data were available (table 26). An 11.8-percent inflation rate in Sweden compared with 1 percent deflation in the United States during this period resulted in a greater real appreciation of the Swedish krona compared with the nominal appreciation. In real terms, the Swedish krona appreciated against the U.S. dollar during January 1983-September 1986 by approximately 20 percent. 1/

1/ The real appreciation of the Swedish krona against the U.S. dollar from the reference period, January-March 1983, indicates the maximum amount that a Swedish producer or its agent would have to increase its U.S. dollar prices of the foreign stainless steel pipe and tube products in the U.S. market without decreasing its profits, assuming the foreign costs had not fallen and were not denominated in U.S. dollars. A Swedish producer, however, may allow its profits to shrink by not increasing its U.S. dollar prices or by increasing its U.S. dollar prices by less than the appreciation would allow.

Table 26.--U.S.-Swedish exchange rates: 1/ Indexes of the nominal and real exchange rates between the U.S. dollar and the Swedish krona, and indexes of producer prices in the United States and Sweden, 2/ by quarters, January 1983-September 1986

(January-March=100)

Period	Nominal exchange-rate index	Real exchange-rate index 3/	U.S. producer Price Index	Swedish producer Price Index
1983:				
January-March.....	100.0	100.0	100.0	100.0
April-June.....	98.3	98.8	100.3	100.7
July-September.....	94.9	97.2	101.3	103.7
October-December....	93.6	96.7	101.8	105.1
1984:				
January-March.....	92.9	97.6	102.9	108.1
April-June.....	92.6	97.9	103.6	109.6
July-September.....	88.1	94.7	103.3	111.0
October-December....	85.1	93.6	103.0	113.2
1985:				
January-March.....	80.0	90.3	102.9	116.2
April-June.....	82.8	93.5	103.0	116.2
July-September.....	88.2	100.3	102.2	116.2
October-December....	94.8	107.1	102.9	116.2
1986:				
January-March.....	100.0	113.2	101.3	114.7
April-June.....	102.9	116.5	99.4	112.5
July-September.....	106.3	120.1	99.0	111.8

1/ Based on exchange rates expressed in U.S. dollars per Swedish krona.
2/ The producer price indexes are aggregate measures of inflation at the wholesale level in the United States and Sweden. As a result, these indexes only approximate actual price changes of the subject stainless steel pipe and tube products in the United States and Sweden. Quarterly producer prices in the United States fell by 1 percent during January 1983-September 1986, compared with rising producer prices in Sweden of 11.8 percent during this period.
3/ The real value of a currency is the nominal value adjusted for the difference between inflation rates as measured by the producer price index in the United States and Sweden.

Source: International Monetary Fund, International Financial Statistics, January 1987.

Lost sales

Two specific allegations of lost sales were reported during the current investigation by two U.S. producers of the welded stainless steel pipes and tubes. 1/ The Commission staff was able to contact the two purchasers cited. In addition, during the preliminary investigation the Commission staff contacted all five purchasers cited in specific lost sales allegations. Conversations with representatives of the firms contacted during the current and preliminary investigations are discussed in detail below.

Lost sales allegations investigated during the current investigation.--***, a distributor of stainless steel pipes and tubes in ***, was named by *** in a lost sales allegation. In April 1986 *** allegedly purchased about 1,500 feet of various sizes of Swedish welded stainless steel pipes at delivered prices averaging about 5 percent below *** delivered prices. Although *** of the firm could not recall the specific transaction, he stated that his firm frequently purchases the types of welded stainless steel pipes covered in the allegation. *** also indicated that prices of the domestic and imported Swedish pipes cited were about what he saw in the market at the time of the allegation, and it is likely that his firm bought the subject imported Swedish material, and if it did it was primarily because of the lower price of the foreign material. *** claims that currently prices of the imported Swedish welded products range from 3 to 4 percent below domestic prices. According to ***, the quality of the domestic and imported Swedish welded stainless steel pipes and tubes is comparable.

*** of *** also commented that its major domestic suppliers of the welded stainless steel pipes and tubes are * * *, whereas *** is its major supplier of the Swedish welded pipes and tubes (*** generally does not buy any other foreign welded stainless steel pipes and tubes). *** indicated that *** used to be a major domestic supplier to his firm. But in 1985 *** dropped *** as a supplier in favor of other domestic firms. *** cited two reasons for this switch. * * *. * * *.

***, a producer of welded stainless steel pipes and tubes in ***, was named by *** in a lost sales allegation. *** allegedly purchased about $1,000,000 of various sizes of Swedish welded stainless steel pipes in June 1985 at delivered prices ranging from 7 to 10 percent below ***'s delivered prices. * * * stated that his firm purchased about $150,000 of the Swedish welded pipe during this period from *** because of its low price. Subsequently, according to ***, he learned that *** was selling the same products as *** to *** enduser customers, so he ended ***'s relationship with ***. *** explained that *** often supplements its own production of welded stainless steel pipes and tubes with purchases from other sources (mostly domestic). These latter supplemental purchases were from stainless steel strip that *** supplied to other domestic mills, which converted it to pipes and tubes and shipped the finished products back to ***.

*** further explained that he has long experience in dealing with the Swedish welded stainless steel pipes and tubes, dating back to his employment * * *. He stated that now, as then, they disrupt the market with the philosophy of "get market share at any price." According to ***, *** has gone after his company's best customers at prices that were below what was necessary to get the business, thereby forcing his firm to significantly reduce its prices or lose the business.

1/ The two reporting U.S. producers were * * *.

Lost sales allegations investigated during the preliminary investigation.--Two U.S. producers of the stainless steel pipes and tubes identified five purchasers in their specific lost sales allegations regarding imports of Swedish stainless steel pipes and tubes, reported during the preliminary investigation. 1/ The Commission staff was able to contact all five of the purchasers cited.

The five purchasers contacted indicated that delivered prices of the imported stainless steel seamless and welded pipes and tubes from Sweden have generally been less than domestic producers' delivered prices during 1983-86. The reported delivered price advantage of the imported Swedish stainless steel products ranged from 12 to 15 percent during this period. Quality of the domestic and imported Swedish stainless steel pipes and tubes was judged to be comparable. In addition, the purchasers agreed that, although some substitution existed between the seamless and welded products, these products were generally used in separate applications. They stated that the seamless products typically carried a price premium, ranging from 10 to 20 percent, over the welded products during 1983-86.

Conversations with representatives of the five firms contacted are discussed in detail below.

Allegations of *** concerning *** stainless steel pipes and tubes.--***, a distributor of stainless steel pipes and tubes in ***, allegedly purchased about *** tons of various sizes of Swedish stainless steel seamless pipes and tubes in *** at delivered prices ranging from *** to *** percent less than ***'s delivered prices. ***, director of purchasing for the firm, could not recall buying the specific alleged products. He explained that his firm purchases mostly special alloy stainless steel pipes and tubes (seamless and welded), which are produced domestically and imported from Sweden. *** pointed out, however, that his firm generally purchases *** from Sweden that are not available domestically. According to ***, his firm's purchases of the imported *** of stainless steel pipes and tubes from Sweden have increased as a proportion of his firm's total purchases of stainless steel pipes and tubes during 1983-86. On the basis of limited purchases of the regular alloy stainless steel pipes and tubes (both seamless and welded), *** stated that delivered prices of the imported stainless steel products from Sweden are generally less than delivered prices of competing domestic products, although the quality of the domestic and imported Swedish pipes and tubes is comparable.

***, a distributor of stainless steel pipes and tubes in ***, was cited in two lost sales allegations. In the first one, *** allegedly purchased about *** tons of various sizes of Swedish stainless steel seamless pipes and tubes in *** at delivered prices averaging *** percent less than ***'s prices. In the second allegation, *** allegedly purchased about *** tons of various sizes and grades of Swedish stainless steel *** in *** at delivered prices ranging from *** to *** percent less than domestic prices. *** of the firm could not recall buying the specific products in either allegation, but stated that his firm buys both domestic and imported (some of it Swedish) stainless steel seamless and welded pipes and tubes. He further stated that ***'s purchases of the imported Swedish material probably increased during 1983-86 as a proportion of his firm's total purchases of the stainless steel products. *** indicated that delivered prices of the Swedish stainless steel pipes and tubes are generally less than domestic producers' delivered prices,

1/ The two reporting U.S. producers were * * *.

although quality of the domestic and imported Swedish products is comparable. Since 1983, *** has seen in his market area the price of the imported seamless products from Sweden as much as 15 percent below competing domestic producers' prices. He pointed out, however, that the price of the imported Swedish seamless products are at about the midrange of competing prices in the U.S. market.

*** commented that the stainless steel seamless pipes and tubes generally carried a price premium averaging about 20 percent over the welded products in his market area during 1983-86. *** views seamless and welded as separate products for inventory and sales purposes, but felt he was not qualified to comment on their technical differences.

***, a manufacturer of *** using stainless steel pipes and tubes, located in ***, allegedly purchased about *** tons of Swedish stainless steel *** in *** at delivered prices about *** percent less than ***'s delivered prices. ***, director of purchasing for ***, stated that his firm did not purchase the alleged imported Swedish products. *** explained that his firm had purchased some imported stainless steel *** from Sweden about 5 years ago on a sample basis, but returned it because they were not satisfied with the quality. According to him, *** has not purchased any imported stainless steel pipes and tubes from Sweden since then. *** further stated that quoted delivered prices of the Swedish stainless steel pipes and tubes (seamless and welded) are generally less than domestic producers' delivered prices by about 5 percent in his market area. *** indicated that domestic producers of the stainless steel pipes and tubes have lowered their prices in his market area from 5 to 10 percent during the last couple of years because of low prices of imports, including prices of the imported Swedish products.

*** stated that stainless steel seamless pipes and tubes generally carried a price premium of 10 to 15 percent over the welded products in his market area during 1983-86. According to him, the seamless and welded products are generally not interchangeable, and his firm does not switch between them.

Allegations of *** concerning *** stainless steel pipes and tubes.--***, a distributor of stainless steel pipes and tubes in ***, allegedly purchased *** tons of Swedish stainless steel *** pipes and tubes in *** at delivered prices about *** percent below ***'s delivered prices. *** could not recall the specific instance cited, but stated that during the last 15 months his firm has purchased imported stainless steel seamless and welded pipes and tubes from Sweden instead of the U.S. product, primarily because of price. According to ***, quality of the domestic and imported Swedish stainless steel pipes and tubes is comparable. *** stated that his firm bought about 70 percent domestic and 30 percent imported stainless steel pipes and tubes in 1985 and January-September 1986, after buying only the domestic product in 1983 and 1984. According to ***, about 95 percent of the imported material came from Sweden. *** stated that delivered prices of the Swedish stainless steel pipes and tubes are generally less than domestic producers' delivered prices by about 12 to 13 percent, but greater than delivered prices of imports from Far East suppliers. *** pointed out that the Swedish price advantage would have to be at least 8 to 10 percent before he would begin switching from the domestic to the foreign product. *** indicated that low prices of the imported Swedish stainless steel products contributed to low U.S. producers' prices.

*** noted that stainless steel seamless pipes and tubes generally carried a price premium of 15 to 20 percent over the welded products in his market area during 1983-86, even when the welded product included the very costly X-ray process to verify the quality of the weld. *** stated that prices of the seamless pipes and tubes in the U.S. market have decreased since 1983, and some imported seamless products from Far East suppliers are priced below some domestic welded products. According to ***, the welded product is increasingly accepted in the market. As an example, *** indicated that today some engineers will specify welded where they used to specify seamless, but will require full X-ray inspection of the welds.

*** also commented on * * *. * * *. According to * * *. *** stated that his firm purchased * * *.

***, a producer of *** stainless steel pipes and tubes and a *** of products requiring stainless steel pipes and tubes, located in ***, allegedly purchased *** tons of Swedish stainless steel *** pipes and tubes in *** at delivered prices about *** percent below ***'s quoted delivered prices. *** of the firm stated that his firm purchased the imported Swedish products during this period instead of the domestic products primarily because of the lower price of the imported products. According to ***, quality of the domestic and imported Swedish stainless steel welded pipes and tubes is comparable. *** noted that his firm uses mostly the *** products.

Lost revenue

Two specific allegations of lost revenue concerning the seamless and welded stainless steel pipes and tubes were reported during the current investigation. 1/ The Commission staff was able to contact the two purchasers cited. In addition, during the preliminary investigation the Commission staff contacted all three purchasers cited in specific lost revenue allegations. Conversations with representatives of the firms contacted during the current and preliminary investigations are discussed in detail below.

Lost revenue allegations investigated during the current investigation.--***, a *** of products using stainless steel pipes and tubes, located in ***, was named by *** in a lost revenue allegation involving the *** products. *** allegedly initially quoted delivered prices for 1,000 feet of various grades and sizes of *** to *** in *** that ranged from about *** to *** percent above delivered prices quoted for the imported Swedish products. *** then reportedly reduced its prices by the amount of this difference to make this sale, representing a revenue loss by *** of about $5,500. Although *** could not recall the exact prices, he confirmed buying some of the cited *** from *** after the domestic firm lowered its prices to those quoted for the imported Swedish material. *** considered the quality and delivery schedules of the domestic and imported Swedish seamless products to be comparable. *** remarked that generally the imported Swedish seamless stainless steel pipes and tubes would have to be priced at least 10 percent below the domestic product before he would consider buying the Swedish material.

***, a distributor of stainless steel pipes and tubes in ***, was named by *** in a lost revenue allegation involving the *** products. *** allegedly initially quoted delivered prices for *** feet of various grades and sizes of *** stainless steel pipes to *** in *** that averaged about *** percent above

1/ The two reporting U.S. producers were * * *.

delivered prices quoted for the imported products from Sweden. *** then reportedly reduced its price by *** percent to make the sale, which would represent a revenue loss by *** of about $3,000. *** confirmed that *** was awarded the sale after it lowered its price by about 5 percent as a result of competition with the Swedish material. *** considered the quality of the domestic and imported Swedish welded products to be comparable.

Lost revenue allegations investigated during the preliminary investigation.--The Commission received specific allegations of lost revenue regarding imports of Swedish *** stainless steel pipes and tubes from ***, during the preliminary investigation. 1/ *** cited three customers to which it allegedly reduced its prices as a result of price competition with the imported Swedish *** pipes and tubes. Conversations with representatives of the three firms contacted are discussed below.

***, a distributor of stainless steel pipes and tubes in ***, was named in one allegation. *** allegedly sold various grades and sizes of *** to *** in *** only after the domestic producer lowered its delivered prices from *** to *** percent below its initially quoted prices to meet delivered prices of the imported products from Sweden. Based on the alleged *** order, this would amount to about $157,000 in lost revenue for ***. ***, director of purchasing for ***, denied this purchase occurred, stating that his firm does not purchase the types of pipes and tubes specified.

***, a manufacturer of *** using stainless steel pipes and tubes in ***, was named in a second allegation of lost revenue. *** allegedly initially quoted delivered prices of various grades and sizes of *** to *** in *** that ranged from *** to *** percent above delivered prices quoted for the imported products from Sweden. Although *** reported quoting its prices for *** tons of the ***, it did not provide the Commission with its final price quotes. As a result, no estimate of possible lost revenue could be calculated. ***, director of purchasing for ***, did not recall the purchase. He explained, however, that domestic producers probably aware of low-priced imports in his market area, including those from Sweden, lowered their prices by 5 to 10 percent during 1983-86.

***, a * * *, was named in a third allegation of lost revenue. *** allegedly initially quoted delivered prices of various grades of *** to *** in *** that were approximately equal to the quoted delivered prices of the imported products from Sweden. *** reported quoting its prices for *** tons of the ***. ***, a Vice President of ***, did not recall the alleged purchase, but stated that his firm purchases the *** primarily from offshore sources, including Sweden. According to ***, * * *.

Discussions with other purchasers of stainless steel seamless and welded pipes and tubes

During the preliminary investigation, the Commission staff was able to contact four other purchasers of the stainless steel pipes and tubes to whom U.S. producers claim they lost sales but were unable to document specific examples.

1/ Three other domestic firms indicated that they had to reduce prices because of competition with lower priced stainless steel pipes and tubes from Sweden, but were unable to identify specific instances.

The four purchasers discussed here indicated that delivered prices of the imported stainless steel seamless and welded pipes and tubes from Sweden were generally less than domestic producers' delivered prices during 1983-86. According to these firms, the delivered price advantage of the imported Swedish stainless steel products ranged from 5 to 12 percent during this period. Quality of the domestic and imported Swedish stainless steel pipes and tubes was judged to be comparable. In addition, the purchasers discussed here agreed that the seamless and welded products were generally used in separate applications, with price premiums for the seamless products ranging from 12 to 40 percent over the welded products.

Conversations with representatives of the four firms contacted are discussed in detail below.

*** of ***, a distributor of stainless steel pipes and tubes in ***, stated that his firm buys both domestic and imported (some of it Swedish) stainless steel seamless and welded pipes and tubes. He stated that the proportion of imported Swedish material in his firm's total purchases of the stainless steel products remained about the same during 1983-86. *** also stated that delivered prices of the Swedish stainless steel pipes and tubes are generally less than domestic producers' delivered prices but greater than delivered prices of imports from Far East suppliers. *** pointed out that the Swedish price advantage would have to be at least 5 percent before he would begin switching from the domestic to the foreign product. Although *** indicated that the imported Swedish stainless steel products contributed to low U.S. producers' prices, according to him, the major cause of low prices in the U.S. market is fierce price competition between U.S. producers in a market where supply exceeds demand.

*** indicated that only a limited overlap in the use of seamless or welded pipes and tubes exists, with the seamless products generally being sold at a price premium of 15 to 40 percent over the welded products in his market area during 1983-86. According to ***, seamless products generally are used in high-pressure, high-risk applications and welded products in low-pressure, low-risk uses. But *** stated that the boundary line between using seamless and welded may vary, according to pressure and corrosive levels of the material being piped, and the level of acceptable risk. As an example, *** indicated that seamless pipes would be preferred in a nuclear plant, although pressures are fairly low and corrosion is not a problem, because no risk of leakage can be tolerated.

***, a distributor of stainless steel pipes and tubes in ***, reported that his firm buys only domestic stainless steel seamless and welded pipes and tubes, although he stated he has been offered the imported Swedish products. *** stated that quoted delivered prices of the Swedish stainless steel pipes and tubes are generally less than domestic producers' delivered prices by about 10 to 12 percent. *** explained that until *** his firm was the supplier of stainless steel pipes and tubes to ***, which accounted for most of *** sales of the stainless steel products. *** specified precisely the products it wanted, and required *** to purchase only from firms on ***'s approved vendor's list, all of which were domestic. But now, according to ***, *** is on ***'s approved vendor's list for stainless steel pipes and tubes. Since his firm lost the *** contract in ***, *** has not purchased much stainless steel pipe and tube.

*** indicated that stainless steel seamless and welded pipes and tubes are not interchangeable, with the seamless products generally being sold at a price premium of 12 to 15 percent over the welded products in his market area during 1983-86. In his experience, *** said the seamless products are used where larger diameters are required or in high pressure applications, whereas the welded products are used where smaller diameters are required.

***, a distributor of stainless steel pipes and tubes in ***, indicated that currently 70 percent of ***'s purchases of stainless steel seamless and welded pipes and tubes are produced domestically and 30 percent are imported from Sweden. He stated that the proportion of imported Swedish material in his firm's total purchases of the stainless steel products fluctuated during 1983-86, depending on price, availability, and quality. According to ***, his firm has purchased the Swedish products instead of U.S. products because, in specific instances, price, quality, and availability of the imported product were more favorable than the domestic product. *** indicated that delivered prices of the Swedish stainless steel pipes and tubes have averaged about 10 percent less than domestic producers' delivered prices in 1986. He pointed out that the Swedish price advantage has to be at least 10 percent before he will switch from the domestic to the foreign product. *** also indicated that the imported Swedish stainless steel products contributed to low U.S. producers' prices.

*** indicated that there are specific uses for seamless and welded stainless steel pipes and tubes, with the seamless products generally being sold at a price premium of 25 to 30 percent over the welded products in his market area during 1983-86.

***, President of ***, a distributor of stainless steel pipes and tubes in ***, stated that his firm purchases mostly imported Japanese, but some imported Swedish, stainless steel seamless and welded pipes and tubes. He stated that delivered prices of the Swedish stainless steel pipes and tubes generally were less than domestic producers' delivered prices by about 5 to 10 percent in his market area during 1983-86. *** pointed out that the Swedish price advantage would have to be at least 5 percent before he would begin switching from the domestic to the foreign product. He stated that the imported stainless steel products, including those imported from Sweden, contributed to low U.S. producers' prices.

*** indicated that only rarely are the stainless steel seamless and welded pipes and tubes substituted for one another, with the seamless products generally sold at a price premium of 30 to 35 percent over the welded products in his market area during 1983-86.